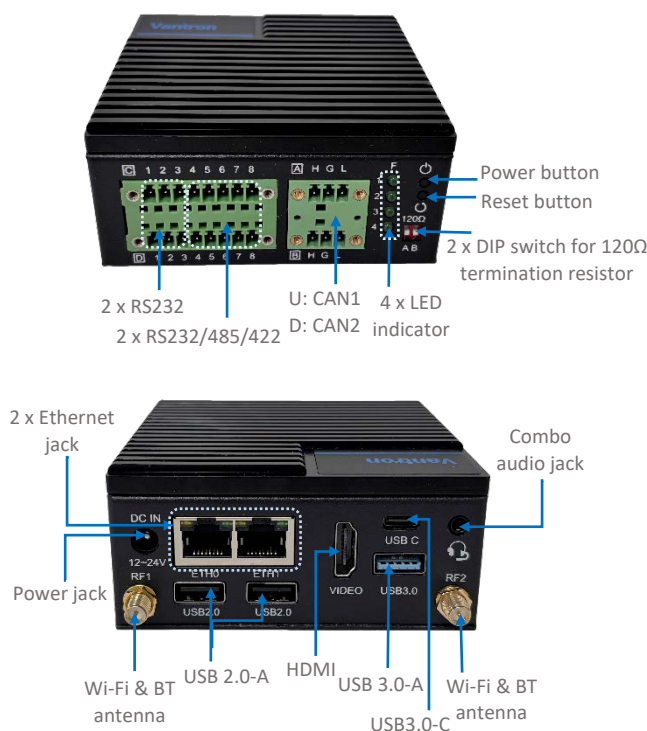# MBOX6211 Industrial Mini Computer

Product Brief

Vantron MBOX6211 is an entry-level industrial mini computer powered by Intel® Celeron® Elkhart Lake N6211 processor that features a dual-core architecture with a base frequency of 1.2GHz. The integrated Intel® UHD Graphics GPU supports H.265/H.264 video codec, enabling smooth 4K video playback at 30Hz while maintaining low bitrates.

MBOX6211 offers two Ethernet jacks, each capable of up to 1000Mbps data transmission, ensuring fast and reliable wired networking. With support for Wi-Fi 802.11 a/b/g/n/ac and BT 5.0, it ensures reliable wireless communication across various environments. The device comes with default 4GB on-board memory and 64GB storage, with expansion options for added flexibility. Moreover, the HDMI port delivers up to 4K video output, making it ideal in industrial and multimedia settings.

MBOX6211 offers rich interfaces, such as serial ports, USB-A and USB-C, CAN, and GPIOs, allowing businesses to connect a wide range of peripherals for extended applications. Overall, MBOX6211 can be widely used in industrial automation, games, retail, and other sectors to offer a reliable and consistent user experience.
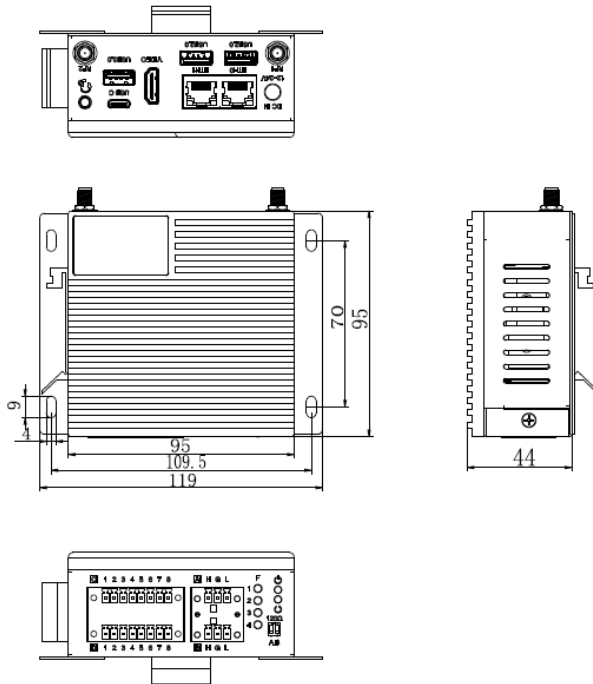
Exterior and Features

Power button
Reset button
2 x DIP switch for 120Ω termination resistor

2 x RS232
2 x RS232/485/422
U: CAN1
D: CAN2
4 x LED indicator

2 x Ethernet jack
Combo audio jack
DC IN
USB C
12~24V
RF1
ETH0   ETH1
VIDEO   USB3.0
RF2
Power jack
USB2.0   USB2.0

Wi-Fi & BT antenna
USB 2.0-A
HDMI
USB 3.0-A
Wi-Fi & BT antenna
USB3.0-C

MBOX6211
Intel® Celeron® N6211 dual-core processor
Support for up to 4K @30Hz video output
Rich industrial I/O for user expansion
Gigabit Ethernet, Wi-Fi, Bluetooth
Fanless design
Windows 10 IoT operating system
Ultra-compact size for flexible integration

MBOX6211 Industrial Mini Computer Datasheet

MBOX6211			
System	CPU	Intel® Celeron® N6211 processor, 2C2T, 1.2GHz (base), 3.0GHz (turbo), 6.5W TDP	
	GPU	Intel® UHD Graphics for 10th Gen Intel® processors	
	Memory	4GB LPDDR4 (Optional: 8GB)	
	Storage	64GB eMMC 5.1 1 x M.2 M-Key (2280), PCIe/SATA for SSD expansion, up to 1TB	
Communication	Ethernet	2 x RJ45, 10/100/1000Mbps	
	Wireless	Wi-Fi 802.11 a/b/g/n/ac + BT 5.0	
Media	Display output	1 x HDMI 1.4b, up to 4K @30Hz	
	Audio	1 x 3.5mm combo audio jack (CTIA standard)	
I/O	Serial port	2 x RS232 (C1-C3, D1-D3)	2 x RS232/RS485/RS422 (C4-C8, D4-D8)
	USB	2 x USB 2.0 Type-A 1 x USB 3.0 Type-A	1 x USB 3.0 Type-C
	CAN	2 x CAN (A: CAN1, B: CAN2)	
	DIP switch	2 x DIP switch for 120Ω CAN Bus termination resistor to prevent signal reflections (A-up: CAN1_H, B-up: CAN2_H)	
	Antenna connector	2 x Wi-Fi & Bluetooth antenna connector (RF1, RF2)	
Miscellaneous	RTC	Supported	
	Security	TPM 2.0	
System Control	Button	1 x ON/OFF button	1 x Reset button (short press to restart the device)
	LED indicator	4 x LED indicator (Power indicator at the top by default, user definable)	
Software	OS	Windows 10 IoT	
Power	Input	12V~24V DC	1 x Power jack
	Consumption	Typical: 16W	Max.: 30W
Mechanical	Dimensions	95mm x 95mm x 44mm (not including wall mount)	
	Installation	Wall mounting	DIN rail mounting
	Weight	518g (not including accessories)	
	Cooling mode	Heat sink	
Environment Condition	Temperature	Operating: -20℃~+70℃	Storage: -40℃~+80℃
	Humidity	10%~95% RH (Non-condensing)	
	Certification	FCC, CE, ISED	

Product Outlines

Ordering Information

Nomenclature

MBOX6211-M-SSD

M.2 SATA SSD: Null-no expansion; SSD1-128GB; SSD2-256GB; SSD3-512GB; SSD4-1TB

Memory capacity: Null-4GB; M1-8GB

Example Ordering No.	Memory	Storage	Description	Operating System
MBOX6211	4GB	64GB		Windows 10 IoT
MBOX6211-M1	8GB	64GB	RS232, RS485, RS422, CAN, USB,	Windows 10 IoT
MBOX6211-SSD1	4GB	64GB + 128GB SSD	dual Ethernet, Wi-Fi, Bluetooth	Windows 10 IoT
MBOX6211-M1SSD1	8GB	64GB + 128GB SSD		Windows 10 IoT

Packing list	
MBOX6211 Industrial mini computer	1
Wi-Fi & Bluetooth antenna	2
Serial port mating connector	2
CAN bus mating connector	2

Optional accessories	
12V 3A DC Power adapter	1
AC power cable	1

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