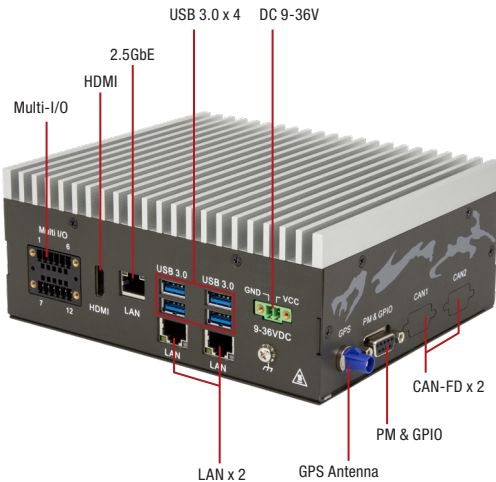


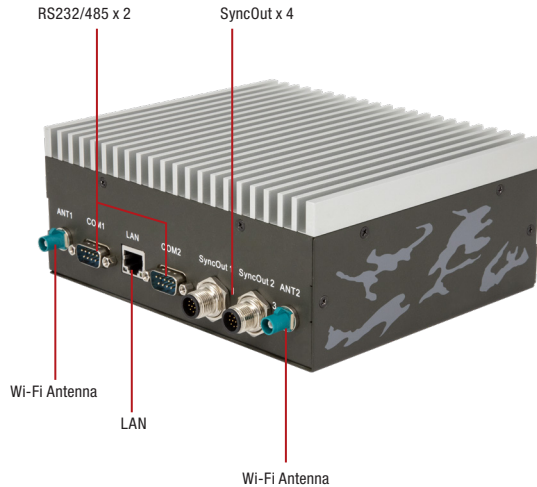
RBX-I2000

Robot Controller with Intel 11th Core™ i7/i5/i3/Celeron Processor with Time Synchronization feature

Front View



Rear View



Features

- 11th Generation Intel Core i7/i5/i3/Celeron Processor SoC
- Max. up to 64G DDR4 3200MHz dual channel memory, non-ECC type
- Support M.2 M key PCIe Gen4 x4 NVMe SSD, max. up to 2TB capacity
- One M.2 E key for Wi-Fi/BT module card
- One mini PCIe slot for PEAK CANbus module card
- Four-channel 1pps + GPS data for LIDAR, Xsens and another robot sensor
- Comprehensive interface of Ethernet, USB, RS-232/485, extend power output, GPIO
- Integrated 2/3D LIDAR SLAM script
- Build-in BMI160 6-axis IMU
- Operating temp range is from 0°C to 50°C

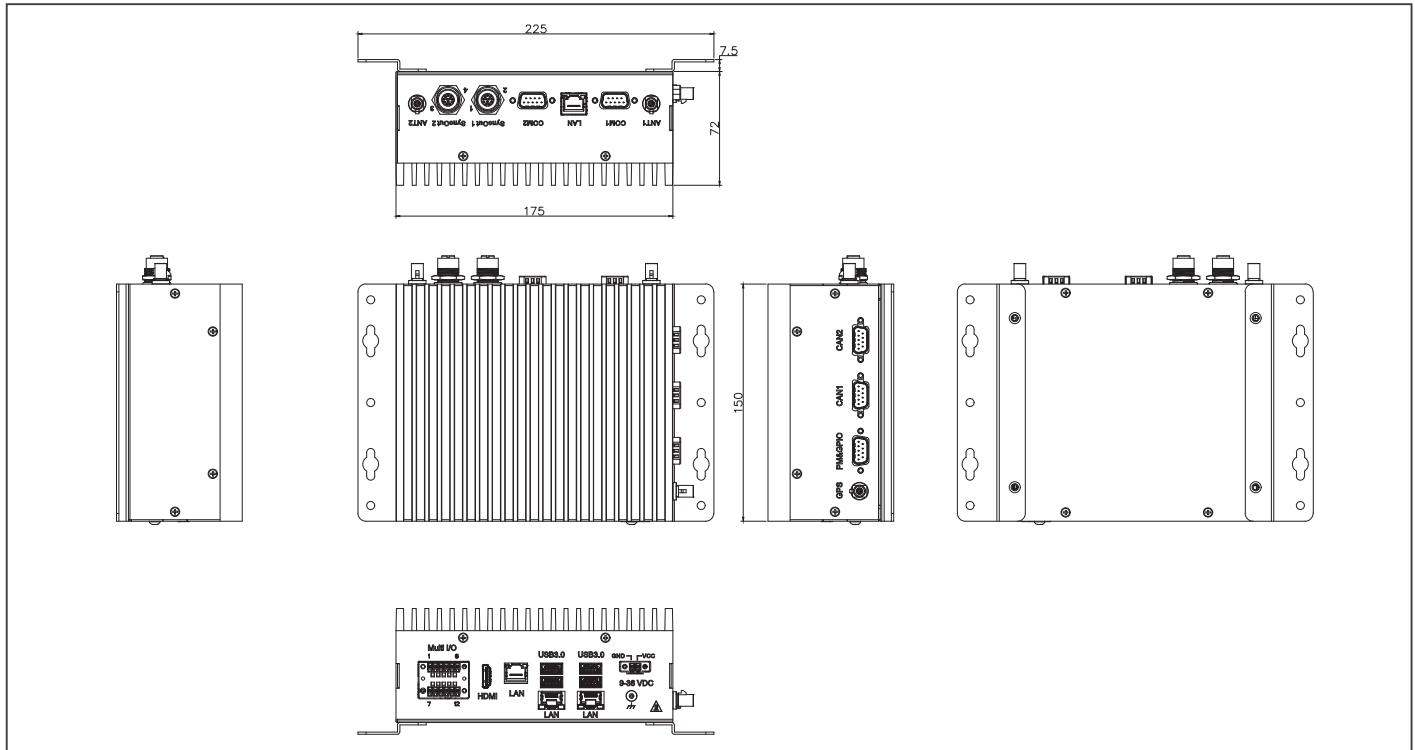


Specifications

System	
Processor	Intel® 11th Generation Core™ i7/i5/i3/Celeron SoC i7-1185G7E (4C, 1.7GHz, up to 4.4GHz, TDP 15W) i5-1145G7E (4C, 1.5GHz, up to 4.1GHz, TDP 15W) i3-1115G4E (2C, 2.2GHz, up to 3.9GHz, TDP 15W) Celeron® 6305E (2C, 1.80GHz, TDP 15W)
Memory	Max. up to 64G DDR4 3200MHz, SO-DIMM x 2, non-ECC type
Storage	M.2 2280 M Key slot x 1 (PCIe4), up to 2TB NVMe SSD 2.5" SATA SSD/HDD bay 3.0 x 1
Real Time Clock	RTC x 1, with 3V CR2032 Lithium battery
Security	TPM 2.0
Indicators	—
Cellular	—
Wireless Lan	M.2 2230 E Key slot x 1 (Wifi 802.11 ac/b/g/n, BT 5.0)
Operating System	Windows 10 IoT Enterprise / Linux (by request)
Support Protocol	—
I/O Interfaces	
HDMI	HDMI 2.0 x 1, support 3840 x 2160 @ 30Hz)
Ethernet	10/100/1GBase-T(X) Ethernet port x 3 2.5Gigabit Ethernet port x 1
USB	USB 3.0 Gen1 x 4
Multi-I/O	8-bit DIO, 2-channel CAN interface
SyncOut	1pps + time date output x4
DB-9	RS232/485 x 2 CAN-FD x 2 PM&GPIO interface x1
Antenna	FAKRA Z code for Wi-Fi x 2 FAKRA C code for GPS x 1
Expansion Slot	Mini PCIe slot x 1, 3026 for GPS module Mini PCIe slot x 1, 3052 for PEAK CANbus
Power Connector	2 Pin 3.81mm Pitch Phoenix Connector
Other Interface	—
Power Supply	
Power Requirement	DC 9 ~ 36V (Optional DC12V), AT Type
Power Consumption	67 W (Full Loading)
Power Mode	Support system auto-power on
Environmental and Mechanical	
Dimension	6.88" x 5.9" x 2.8" (175 x 150 x 72mm)
Weight	4.4lb (2kg)
Mount Options	Wall Mount
Operation Temperature	32 °F ~ 122 °F (0 °C ~ 50 °C)
Storage Temperature	-40 °F ~ 176 °F (-40 °C ~ 80 °C)
Operation Humidity	10% ~ 90% relative humidity, non-condensing
Vibration	3Grms/operation – eMMC, microSD (IEC68-2-64)
Shock	30G peak acceleration (11 msec. duration, eMMC, microSD, or SSD) IEC 68-2-27
EMI	CE & FCC class A

Dimension

Unit: mm



Ordering Information

Part Number	CPU	Memory	Thermal	Storage	LAN	USB	Expansion slot	Power	Operation Temp.	Others
RBX-I2000-A10-0701	11th Generation Core Intel® i7-1185G7E SoC	DDR4 3200MHz, SO-DIMM x 2, 32G DDR4	Fanless	1TB SSD	GbE x 4	USB3.0 Gen 1 x4	M.2 E Key 2230 x 1 Mini PCIe slot, 3052 x1 Mini PCIe slot, 3026 x1	DC 9 ~ 36V	0°C ~ 50°C @ 0.6 m/s airflow	—
RBX-I2000-A10-0501	11th Generation Core Intel® i5-1145G7E SoC	DDR4 3200MHz, SO-DIMM x 2, 16G DDR4	Fanless	512G SSD	GbE x 4	USB3.0 Gen 1 x4	M.2 E Key 2230 x 1 Mini PCIe slot, 3052 x1 Mini PCIe slot, 3026 x1	DC 9 ~ 36V	0°C ~ 50°C @ 0.6 m/s airflow	—
RBX-I2000-A10-0301	11th Generation Core Intel® i3-1115G4E SoC	DDR4 3200MHz, SO-DIMM x 2, 16G DDR4	Fanless	256G SSD	GbE x 4	USB3.0 Gen 1 x4	M.2 E Key 2230 x 1 Mini PCIe slot, 3052 x1 Mini PCIe slot, 3026 x1	DC 9 ~ 36V	0°C ~ 50°C @ 0.6 m/s airflow	—

Packing List

- RBX-I2000 x1
- Wall mount kit x2
- FAKRA Z Jack to SMA cable x2 (for wifi antenna)
- FAKRA C code to SMA cable x1 (for GPS antenna)

Optional Accessories

- **1255300611**
Power Adapter.DC.100/240V.12V.5A.60W.2p
phenix P=3.81mm.FSP.FSP060-
DHAN3/9NA0608085
- **9689Y00059**
GNSS PCI Express Half-Mini Card/ GE-
8264T,26.8mm*30mm*2.8mm.NaviSys.GE-8264T
- **9686926003**
M.2 2230 WiFi module.802.11ac, Band.2.4G/5G,W/
BT 5, Intel.9260.NGWW.NV.958867
- **1702031802**
POWER CORD.3P-125V 10A 180D.1.8M.USA.
FANJET. YP12/YC-12
- **1702031803**
POWER CORD.3P-250V 10A 180D.1.8M.EU.FAN-
JET. YP-22/YC-12
- **170203180J**
POWER CORD.3P-250V 13A.UK type.1830mm
- **1702031811**
POWER CORD.3P-125V.10A.180D.1.8M.TWN/BSMI.
FANJET.YP-12/YC-12
- **170203180E**
Power cord.3P.125V/7A.1.8M.PSE YP12/YC12
Certificate