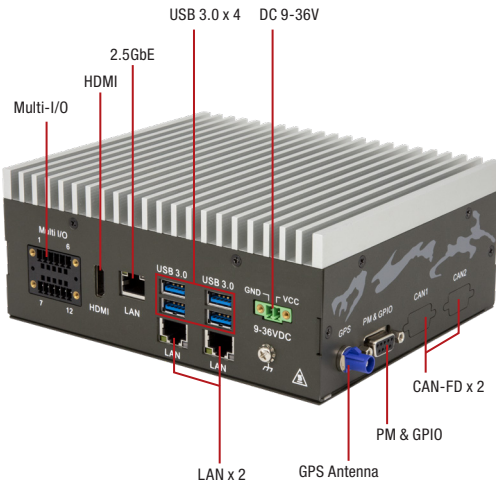
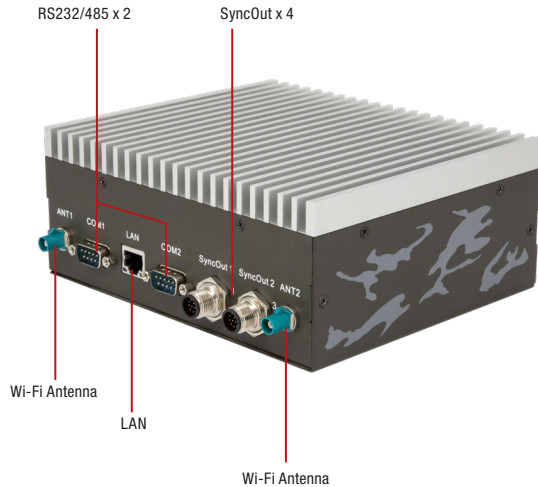


Front View



Rear View



Features

- 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 capability
- Four channel CANbus interface, compatible with PEAK CAN module.
- Four syncout channel of PPS + ToD for external sensors.
- Built-in BMI160 6-axis IMU for robot odometry
- Comprehensive interface of RS-232/485, GPIO, PWM and power managed
- SyncBotic LiDAR based SLAM tool by using NDT algorithm
- Support ROS1, ROS2, Autoware, Apollo framework
- Integrated VHDL code for time stamp with GPS signal

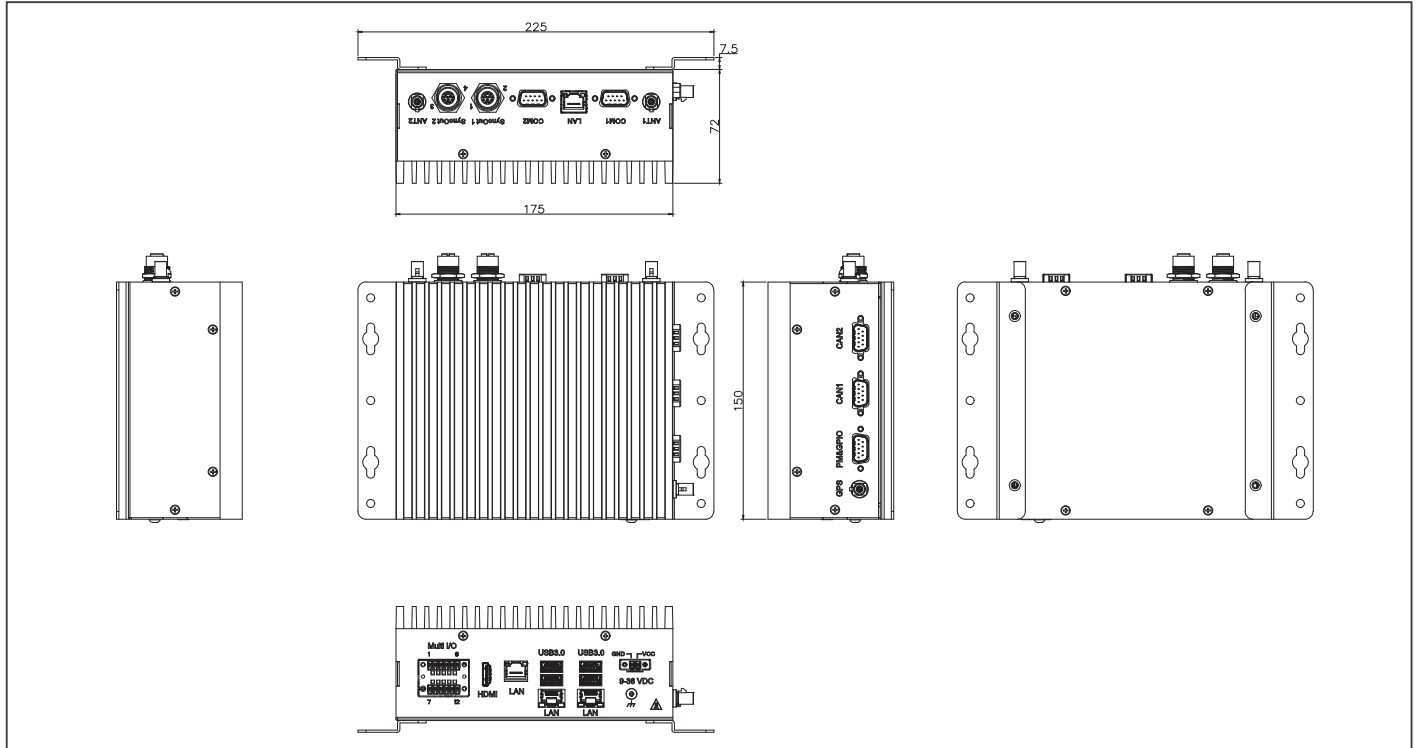


Specifications

System	
Processor	Intel® 11th Generation Core™ i7/i5/i3/Celeron SoC i7-1185G7E (4C, 1.7GHz, up to 4.4GHz, TDP-up 28W) i5-1145G7E (4C, 1.5GHz, up to 4.1GHz, TDP-up 28W) i3-1115G4E (2C, 2.2GHz, up to 3.9GHz, TDP-up 28W)
Memory	Max. up to 64G DDR4 3200MHz, SO-DIMM x 2, non-ECC type
Storage	M.2 2280 M Key slot x 1 (PCIex4), 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)
Robot Framework&Script	ROS 1/ ROS 2, LiDAR-base SLAM script (*NDT algorithm)
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 for robot external sensors *note (*note Support Velodyne VLP-16, Xsens MTi-670, stereo camera)
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.	Time sync
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	Syncout x4
RBX-I2100-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	Syncout x4
RBX-I2100-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	Syncout x4
RBX-I2100-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 series controller
- Wi-Fi module x1
- GPS module x1
- Wall mount kit x1
- 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
phoenix P=3.81mm.FSP.FSP060-DHAN3/9NA0608085
- **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