



RUGGED EMBEDDED COMPUTER

RCO-1000-ASL-20-00B

Fanless Mini Computer with Intel® Atom® x7433RE/x7835RE Processors, 1x DP, 1x HDMI, 4x USB, 1x 2.5" SATA HDD Bay, OOB Support



Features

- Support Intel® Atom® x7433RE/x7835RE Processors
- 1x 262-pin DDR5 SO-DIMM. Max. up to 32GB
- 2x 2.5GbE (Wake-on-LAN and PXE)
- 1x 2.5" SATA HDD Bay
- 1x M.2 (B Key, 2242 / 3042 / 3052) for storage/4G/5G Module
- 2x RS-232/422/485, 3x USB 3.2 Gen2, 1x USB 2.0
- OOB Remote Management Supported
- 9 to 36VDC Wide Range Power Input Supporting AT/ATX Mode
- Wide Operating Temperature -40°C to 70°C
- TPM 2.0 Supported
- With 2x Universal Expansion Slots
- UL Listed

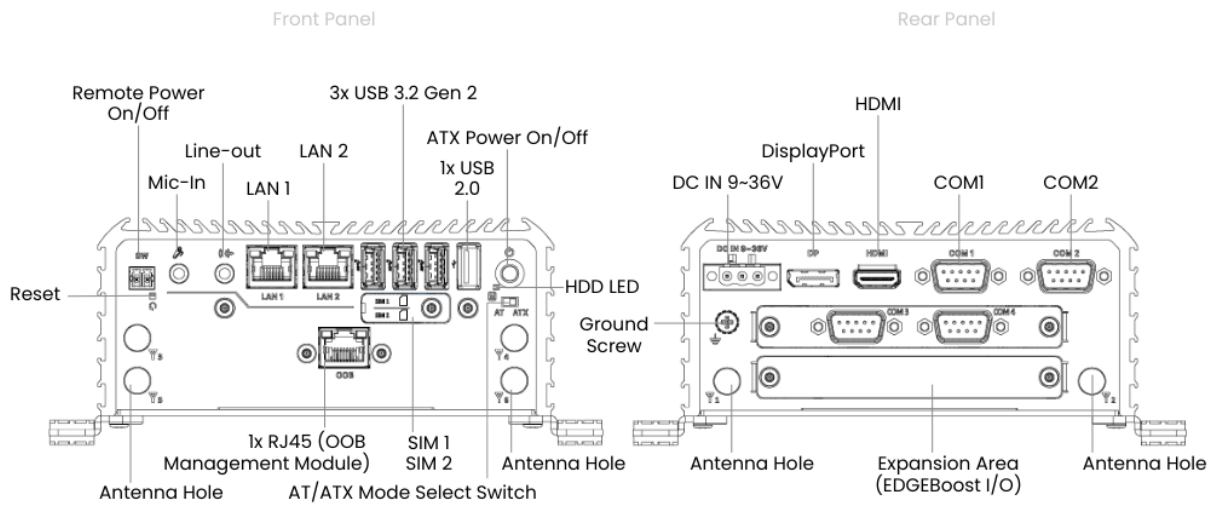


Specifications

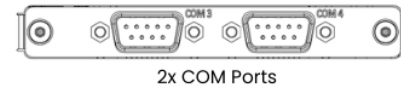
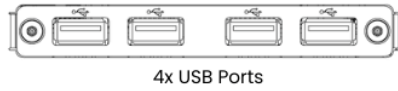
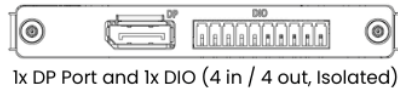
System	Environment
Processor - Intel Atom® x7433RE Processor 6M Cache, up to 3.40 GHz 4 core 9W (Default) - Intel Atom® x7835RE Processor 6M Cache, up to 3.60 GHz 8 core 12W	Operating Temperature -40°C to 70°C Storage Temperature -40°C to 85°C Relative Humidity 10% to 95% (non-condensing) Certification UL, CE, FCC Class A Vibration With SSD: 5 Grms, 5 - 500 Hz, 0.5 hr/axis With HDD: 1 Grms, 5 - 500 Hz, 0.5 hr/axis
System Chipset SoC integrated LAN Chipset 2.5 GbE1: Intel I226 (Support Wake-on-LAN and PXE) 2.5 GbE2: Intel I226 (Support Wake-on-LAN and PXE) Audio Codec Realtek ALC888C System Memory 1x 262-Pin DDR5 4800/5600 MT/s SO-DIMM. Max. up to 32GB Non-ECC	Shock With SSD: 50G, half sine, 11ms
Graphics Intel® UHD Graphics BIOS AMI 256Mbit SPI BIOS Watchdog Software Programmable Supports 1~255 sec. System Reset TPM TPM 2.0	Physical Dimensions 150 (W) x 105 (D) x 65 (H) mm Weights 1 kg Construction Extruded Aluminum with Heavy Duty Metal Mounting Options Wall Mounting SIDE / VESA / DIN-Rail Mounting (Optional)
Display Display Port 1x DisplayPort (4096 x 2304@60Hz) HDMI 1x HDMI 1.4b (Resolution up to 3840x2160 @ 30 Hz) Multiple Display Dual Display	
Storage M.2 1x M.2 (B Key, 2242 / 3042 / 3052) for storage/4G/5G Module SIM Socket 2x External SIM socket SSD/HDD 1x Internal 2.5" SATA HDD Bay (support H=9.5 mm)	
Expansion M.2 1x M.2 E key Type: 2230 (Support PCIe x1 + USB 2.0 signal for WiFi and Bluetooth) Expansion Modules • 1-Port OOB and 2-port COM (RS232/422/485)	
I/O Audio 1x Mic-in, 1x Line-out CAN 2x CAN 2.0 A/B 2-pin Internal header COM 2x RS-232/422/485 EDGEBoost I/O Bracket 2x EDGEBoost I/O Bracket (By mini PCIe interface, Proprietary Module) LAN 2x RJ45 (2.5 GbE) OOB 1x RJ45 (OOB Management Module, Optional) USB 3x USB 3.2 Gen 2 (10 Gbps) 1x USB 2.0 Others 6x WiFi Antenna Holes 1x Power Switch, 1x AT/ATX Switch, 1x Remote Power On/Off 1x Internal CMOS Battery Cable 1x 4-PIN FAN Connector 1x Ground Screw 1x HDD LED, 1x Reset	
Operating System Windows Windows 10/11 Linux Linux Ubuntu 22.04	
Power Power Adapter Optional AC/DC 12V/5A, 60W Power Mode AT, ATX Power Ignition Sensing Adjustable power ignition management can be achieved through BIOS and optional daughter board. Power Supply Voltage 9~36VDC Power Connector 3-pin Terminal Block Power Protection OVP (Over Voltage Protection); OCP (Over Current Protection) Reverse Protection	

- For Intel® Atom® Processor x7433RE operating temperature limited -40°C to 70°C
- Intel CPUs may experience thermal throttling depending on extreme application workloads; this is also due to an increase in the physical CPU cores from the Intel silicon (up to 8 cores). Please note, this does not indicate system malfunction or problems in the fanless design. Please consult our embedded engineers for the best configuration to match your application requirements.
- All specifications and photos are subject to change without notice.

External I/O Mechanical Layout

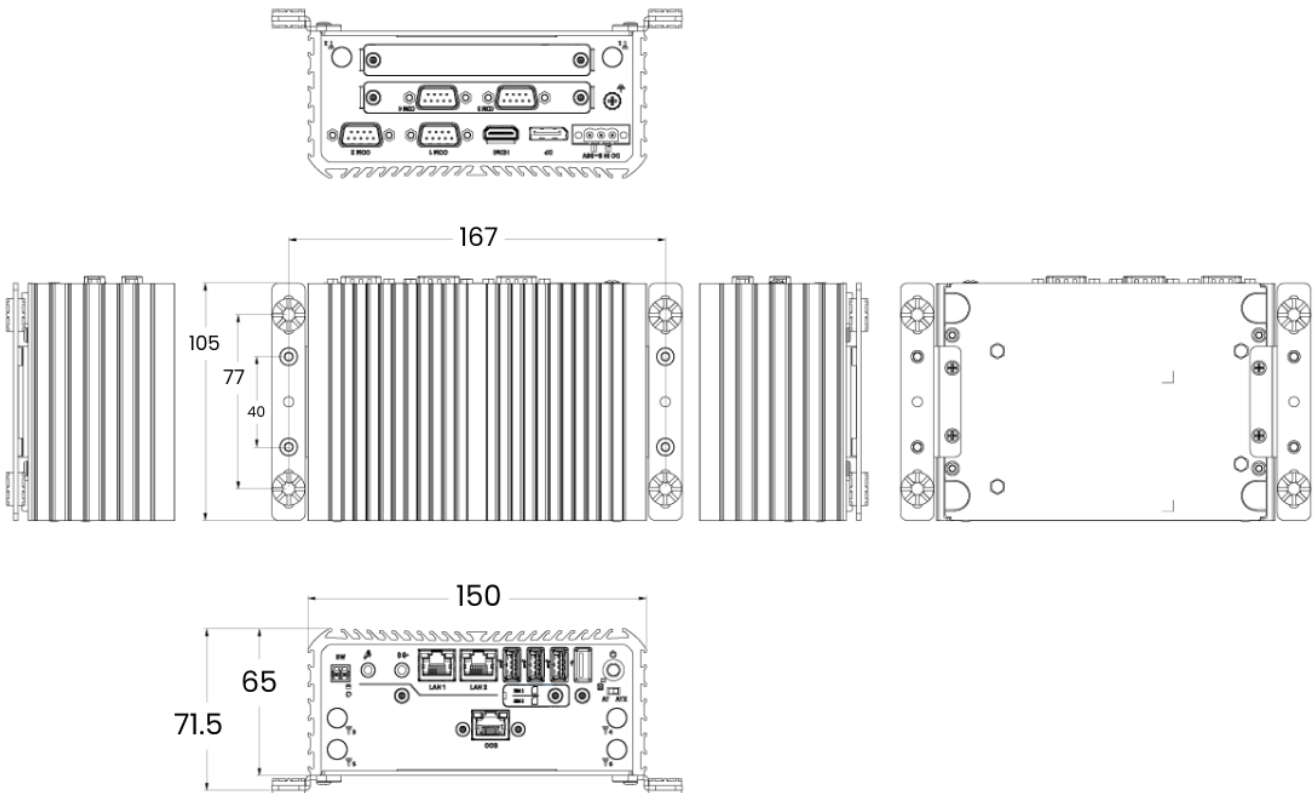


Available EDGEBoost I/O for Rear Panel



Dimension

Unit: mm



Compliances and Standards

Shock	With SSD: 50G, half sine, 11ms IEC60068-2-27:2008 Designed to comply with MIL-STD-810H Method 516.8 Procedure I
Vibration	With SSD: 5 Grms, 5 - 500 Hz, 0.5 hr/axis With HDD: 1 Grms, 5 - 500 Hz, 0.5 hr/axis IEC60068-2-64:2008 Designed to comply with MIL-STD-810H Method 514.8 Procedure I
Operating Temperature	-40°C to 70°C IEC60068-2-1:2007 (Cold test procedure) IEC60068-2-2:2007 (Dry heat test procedure) IEC60068-2-3:2007 (Damp heat, steady state, test procedure) IEC60068-2-14:2009 (Wide temperature range thermal shock)
EMC	<ul style="list-style-type: none"> • FCC Class A • CE • ICES-003 • UKCA • Industrial EMC Compliance - EN 61000-4-2: 2009 - EN IEC 61000-4-3: 2020 - EN 61000-4-4: 2012 - EN 61000-4-5: 2014 +A1: 2017 - EN 61000-4-6: 2014
Safety	<ul style="list-style-type: none"> • UL Safety: UL62368-1, 3rd Ed., (cULus) • Test procedure: CB Scheme • Standard: IEC 62368-1:2018

Available Models

Model No.	Description
RCO-1000-ASL-x7433RE-20-00B	Fanless Mini PC with Intel® Atom® x7433RE Processor, 1x RJ45 OOB, 2x EDGEBoost IO
RCO-1000-ASL-x7835RE-20-00B	Fanless Mini PC with Intel® Atom® x7835RE Processor, 1x RJ45 OOB, 2x EDGEBoost IO

Optional Accessories

Model No.	Description
1-TPCD00002	Power Cord, European Type, 180cm
1-TPCD00001	Power Cord, 3-pin UK Type, 180cm
1-TPCD00005	Power Cord, 3-pin US Type, 180cm
3-SIDE-0003	RCO-1000-ASL-20 Series Side Mount Kit
3-VESA-0003	RCO-1000 Series VESA Mount Kit
3-DINR-0004	DIN-Rail Mount Kit
3-RC1200IGKIT	MOD, PWR IGNITION, KIT, 1000-ASL
3-RC12002SKIT	MOD, EBIO, 2XCOM, 3, 4, 1000-ASL

Packing List

1x RCO-1000-ASL-20-00B Series Embedded System
1x Wall Mount Kit
1x Accessory Kit

Exports And Tariff Codes

ECCN	5A992.c
HTS	8471.50.0150
ScheduleB	84.71