



FANLESS EMBEDDED SYSTEMS

RCO-3222EE series

Advanced Fanless Embedded System with Intel® Pentium® Processor N4200, 2x LAN, 2x PCIe Expansion Slot



FEATURES

- Intel® Pentium® Processor N4200, Quad Core, 2MB Cache, 2.5 GHz
- 1x 204-pin DDR3L SODIMM. Max up to 8GB (un-buffered and non-ECC)
- Triple independent display supported by 1x DVI-I and 1x DisplayPort
- 2x Intel® GbE supporting Wake-on-LAN and PXE
- 2x 2.5" SATA HDD bay, 1x mSATA, 1x CFAST
- 2x full-size Mini PCIe for communication or expansion modules, 2x SIM socket
- 6x RS-232/422/485 (w/ 4x internal), 2x USB 3.0, 2x USB 2.0, TPM2.0
- 2x PCIe x4 expansion, 3x universal bracket (for mini PCIe application)
- 8x DI + 8x DO with isolation
- 9 to 50VDC wide range power input supporting AT/ATX mode
- -40°C to 70°C extended operating temperature

SPECIFICATIONS

System

Processor	Intel® Pentium Processor N4200, Quad Core, 2MB Cache, 2.5 GHz
System Chipset	SoC integrated
LAN Chipset	GbE1 & GbE2: Intel® I210-AT (Support Wake-on-LAN and PXE) GbE3-GbE6: Intel® I210-AT (Optional)
Audio Codec	Realtek ALC888S
System Memory	1x 204-Pin DDR3L 1600/1867MHz SODIMM. Max. up to 8 GB (un-buffered and non-ECC)
BIOS	AMI 128Mbit SPI BIOS
Watchdog	Software Programmable Supports 1~255 sec. System Reset
TPM	TPM2.0

Display

VGA	Yes (by optional split cable)
DVI	1x DVI-I
DisplayPort	1x DisplayPort
Multiple Display	Triple Display

Storage

SSD/HDD	1x Internal 2.5" SATA HDD Bay 1x Removable 2.5" SATA HDD Bay
mSATA	1x mSATA (shared by 1x Mini PCIe & 1x SATA)
CFAST	1x CFAST (shared by 1x mSATA & 1x SATA)
SIM Socket	2x External SIM socket

Expansion

Mini PCI Express	1x Full-size Mini-PCIe Socket with USIM socket (PCIe + USB + SATA) (Share by 1x SATA Connector) 1x Full-size Mini-PCIe Socket with USIM socket (USB)
PCI Express	2x PCIe x4 slot with 1-lane Gen2 PCIe Signal

Operating System

Windows	Windows 10
Linux	Linux kernel 4.X

I/O

COM	2x RS-232/422/485 4x RS-232/422/485 (internal)
USB	2x USB 3.0, 2x USB 2.0
LAN	2x RJ45
Audio	1x Mic-in, 1x Line-out
DIO	8 in / 8 out (Isolated)
Universal I/O Bracket	3x Universal I/O Bracket (By mini PCIe interface)
Others	4x WiFi Antenna Holes 1x Power Switch, 1x AT/ATX Switch, 1x Remote Power On/Off

Power

Power Mode	AT, ATX
Power Supply Voltage	9~50VDC
Power Ignition Sensing	Power Ignition Management
Power Connector	3-pin Terminal Block
Power Adaptor	Optional AC/DC 12V/5A, 60W
Power Protection	OVP (Over Voltage Protection) OCP (Over Current Protection) Reverse Protection

Environment

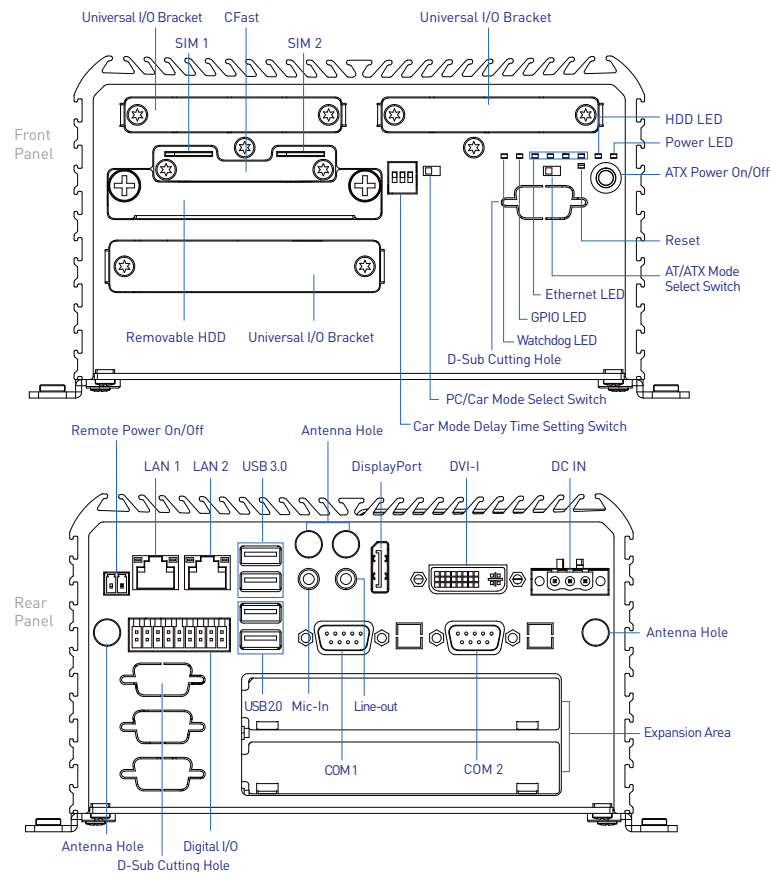
Operating Temp.	-40°C to 70°C
Storage Temp.	-40°C to 85°C
Relative Humidity	10% to 95% (non-condensing)
Vibration	With SSD: 5 Grms, 10 - 500 Hz, 0.5 hr/axis With HDD: 1 Grms, 10 - 500 Hz, 0.5 hr/axis
Shock	With SSD: 50G, half sine, 11ms
Standards / Certification	CE, FCC Class A

Physical

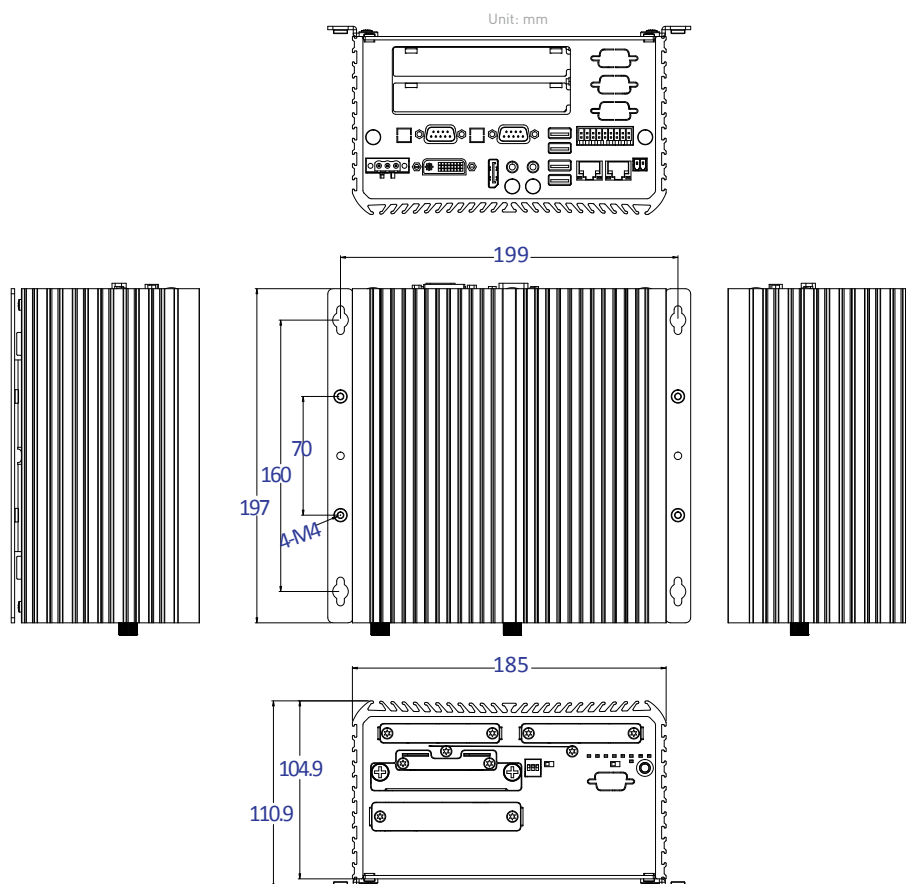
Construction	Extruded Aluminum with Heavy Duty Metal
Dimension	185 (W) x 197 (D) x 104.9 (H) mm
Weight	2.83 kg
Mounting	Wall Mounting

* All specifications and photos are subject to change without notice.

EXTERNAL I/O MECHANICAL LAYOUT



DIMENSION



ORDERING INFORMATION

MODEL NO.	DESCRIPTION
1-E09A06007	Adapter AC/DC 12V 5A 60W with 3pin Terminal Block Plug 5.0mm Pitch
SFICBL022	Power Cord, 3-pin US Type, 180cm
1-TPCD00002	Power Cord, European Type
1-TPCD00001	Power Cord, 3-pin UK Type, 180cm

PACKING LIST

- 1x RCO-3200 Series Embedded System
- 1x Utility DVD Driver
- 1x Wall Mount Kit
- 1x Accessory Kit
- 1x DVI to VGA Adapter

AVAILABLE MODELS

MODEL	MODEL NO.	DESCRIPTION
RCO-3222EE	RCO-3222EE-N4200	Advanced Fanless Embedded System with Intel® Pentium® Processor N4200, 2x LAN, 2x PCIe Expansion Slot