



FLASH STORAGE COMPUTING SYSTEM

RCO-6000-CML-4NS

AI Edge Inference Computer w/ LGA 1200 for Intel 10th Gen CPU & W480E PCH, 4x U.2 15mm NVMe, Software RAID



Features

- LGA 1200 socket for 10th Gen. Intel® CML S Processor (65W/35W TDP)
- Intel® W480E chipset
- 2x DDR4 2666/2933MHz SODIMM. Max. up to 64GB
- Triple Independent Display by 1x DVI-I and 2x DisplayPort
- 2x Intel® GbE supporting Wake-on-LAN and PXE
- 2x Full-size Mini PCIe for communication or expansion modules, 2x SIM socket
- 2x Removable 2 Bay NVMe SSD Module with RAID 0, 1 (Support H=15mm)
- 3x 2.5" SATA HDD Bay (1x Internal) and with RAID 0, 1, 5 support
- 1x M.2 (E Key, PCIe x1, USB 2.0, 2230, Support CNVi)
- 8x RS-232/422/485 (6x internal), 6x USB 3.2 Gen 2, 3x USB 3.2 Gen 1 (1x internal)
- 9 to 48VDC Wide Range Power Input Supporting AT/ATX Mode
- Wide Operating Temperature -25°C to 60°C (35W/65W CPU)
- TPM 2.0 Supported

Specifications

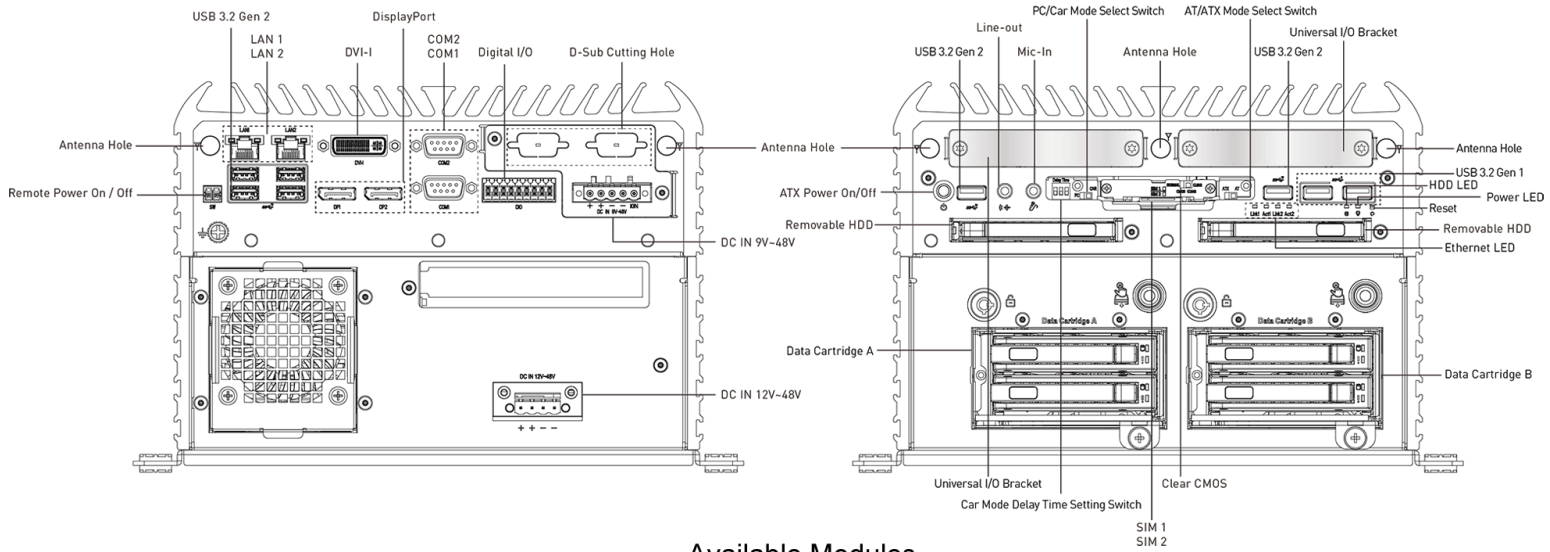
System		Universal I/O Bracket	2x Universal I/O Bracket (By mini PCIe interface)
Processor		USB	6x USB 3.2 Gen 2 (10 Gbps) 3x USB 3.2 Gen 1 (5 Gbps, 1x Internal) 2x USB 2.0 header (internal)
Support 10th Gen Intel® CML S Processor (LGA 1200, 65W/35W TDP)		Others	5x WiFi Antenna Holes 1x Power Switch, 1x AT/ATX Switch, 1x Remote Power On/Off 1x PC/Car Mode Switch, 1x Delay Time Switch 1x Removable CMOS Battery 4x 4-Pin Power Connector, 1x 4-PIN FAN Connector
-Intel® Xeon® W-1290TE, 10 Cores, 20MB Cache, up to 4.5 GHz		Operating System	
-Intel® Xeon® W-1270TE, 8 Cores, 16MB Cache, up to 4.4 GHz		Windows	Windows 10
-Intel® Xeon® W-1250TE, 6 Cores, 12MB Cache, up to 3.8 GHz		Linux	Linux kernel
-Intel® Core™ i9-10900E, 10 Cores, 20MB Cache, up to 4.7 GHz		Power	
-Intel® Core™ i9-10900TE, 10 Cores, 20MB Cache, up to 4.5 GHz		Power Adapter	Optional AC/DC 24V/5A, 120W Optional AC/DC 24V/9.2A, 220W Optional AC/DC 24V/11.67A, 280W (For GPU/Card Expansion)
-Intel® Core™ i7-10700E, 8 Core, 16MB Cache, up to 4.5 GHz		Power Mode	AT, ATX
-Intel® Core™ i7-10700TE, 8 Cores, 116MB cache, up to 4.4 GHz		Power Ignition Sensing	Power Ignition Management
-Intel® Core™ i5-10500T, 6 Cores, 12MB Cache, up to 4.2 GHz		Power Supply Voltage	2x Power Input 9~48VDC 12~48VDC for NVMe EDGEboost Node
-Intel® Core™ i5-10500TE, 6 Core, 12MB Cache, 3.7 GHz		Power Connector	5-pin Terminal Block 4-pin Terminal Block for NVMe EDGEBoost Node (12V requires 4-pin terminal block)
-Intel® Core™ i3-10100T, 4 Cores, 6MB cache, up to 3.8 GHz		Power Protection	OVP (Over Voltage Protection); OCP (Over Current Protection) Reverse Protection
-Intel® Core™ i3-10100TE, 4 Cores, 9MB Cache, up to 3.6 GHz		Environment	
System Chipset Intel® W480E Chipset		Operating Temperature	-25°C to 60°C (35W/65W CPU)
LAN Chipset GbE1: Intel I219 (Support Wake-on-LAN and PXE) GbE2: Intel I210 (Support Wake-on-LAN and PXE)		Storage Temperature	-30°C to 85°C
Audio Codec Realtek ALC888S		Relative Humidity	10% to 95% (non-condensing)
System Memory 2x 260-Pin DDR4 2666 /2933MHz SODIMM. Max. up to 64GB (ECC and Non-ECC)		Certification	CE, FCC Class A
Graphics Intel® UHD Graphics 630		Vibration	With SSD: 3 Grms, 5 - 500 Hz, 0.5 hr/axis With HDD: 1 Grms, 5 - 500 Hz, 0.5 hr/axis
BIOS AMI 256Mbit SPI BIOS		Shock	With SSD: 20G, half sine, 11ms
Watchdog Software Programmable Supports 1~255 sec. System Reset		Physical	
TPM TPM 2.0		Dimensions	240 (W) x 261 (D) x 166.9 (H) mm
Display		Weights	10.2 kg
Display Port 2x DisplayPort, support resolution 4096 x 2304, DP++		Construction	Extruded Aluminum with Heavy Duty Metal
DVI 1x DVI-I, support resolution 1920 x 1200		Mounting Options	Wall Mounting
Multiple Display Triple Display			
VGA Yes (by optional split cable)			
Storage			
M.2 1x M.2 (E Key, PCIe x1, USB 2.0, 2230, Support CNVi)			
NVMe 2x Removable Cannister Bricks with 2.5" 4 Bay U.2 NVMe SSD (Support H=15mm) with Software RAID 0, 1, 5, 10			
SIM Socket 2x External SIM socket (Mini PCIe attached)			
SSD/HDD 1x Internal 2.5" SATA/SSD HDD Bay (support H=9mm) 2x Removable 2.5" SATA HDD Bay (support H=7mm, Hot-swappable) Support RAID 0, 1, 5			
Expansion			
Mini PCIe 2x Full-size Mini PCIe			
PCIe 1x PCIe x16 (8-lane) 1x PCIe x4 (1 Lane)			
Expansion Modules			
Occupied One Universal I/O Slot:			
• 4-port GbE module with Intel® I350 Chipset, RJ-45 or M12 connector (PoE optional)			
• 2-Port RJ45 10GbE with Intel X710 Chipset			
• 4-Port USB with Renesas uPD720201K8 host controller (share PCIe Gen2 x1 bandwidth)			
• 1x M.2 for 5G (B Key, PCIe x1, USB 3.0, 3042/3052), Including 2x SIM socket, 1x SIM switch (1x Universal Slot Only)			
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 ; 6x RS-232/422/485 (internal)		
DIO	8 in / 8 out (Isolated)		
LAN	2x RJ45		

* For 10th Gen Intel CPUs configured to run at 65W, operating temperatures will be limited to 60°C.

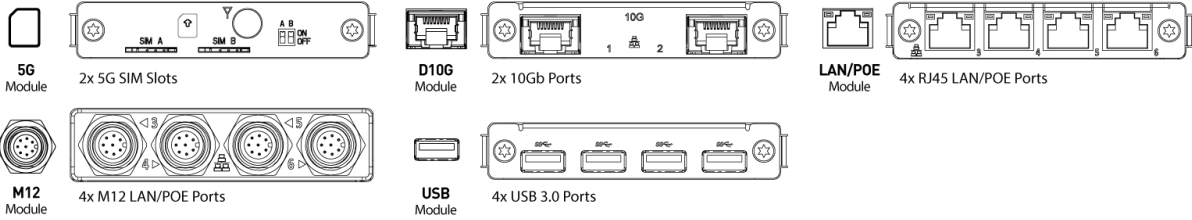
** 65W CPUS may experience thermal throttling depending on extreme application workloads; this is also due to an increase in the physical CPU cores from the Intel silicon (up to 10 cores). Please note, this does not indicate system malfunction or problems in the fanless design. Please consult our embedded 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

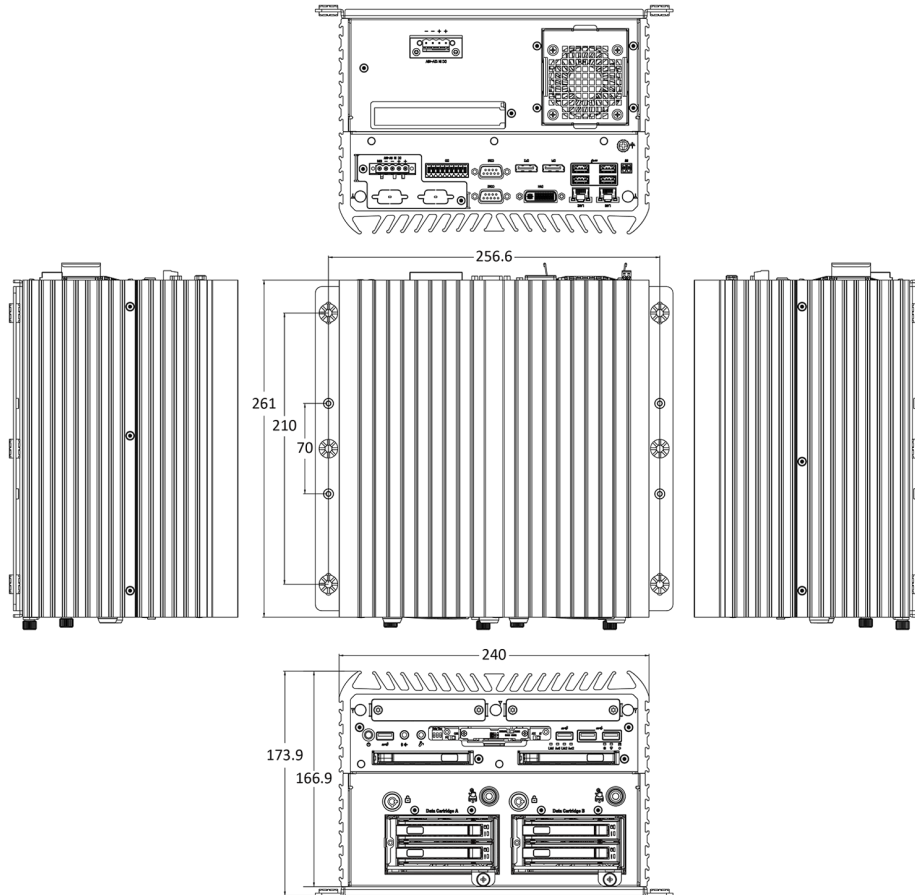


Available Modules



Dimension

Unit: mm



Available Models

Model No.	Description
RCO-6000-CML-4NS	AI Edge Inference Computer w/ LGA 1200 for Intel 10th Gen Processor and W480E PCH, 4x U.2 15mm NVMe, Software RAID

Optional Accessories

Model No.	Description
1-E09A12002	Adapter AC/DC 24V 5A 120W with 3pin Terminal Block Plug 5.0mm Pitch
1-E09A22102	Adapter AC/DC 24V 9.2A 220W with 3pin Terminal Block Plug 5.0mm Pitch
1-E09A22801	Adapter AC/DC 24V/11.67A 280W with 3pin Terminal Block Plug 5.0mm Pitch
SFICBL022	Power Cord, 3-pin US Type, 180cm
1-TPCD00002	Power Cord, European Type, 180cm
1-TPCD00001	Power Cord, 3-pin UK Type, 180cm

Packing List

1x RCO-6000-CML-4NS
1x Wall Mount Kit
1x Accessory Kit
1x DVI to VGA Adapter