



## FLASH STORAGE COMPUTING SYSTEM

## RCO-6000-CML-4NH

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



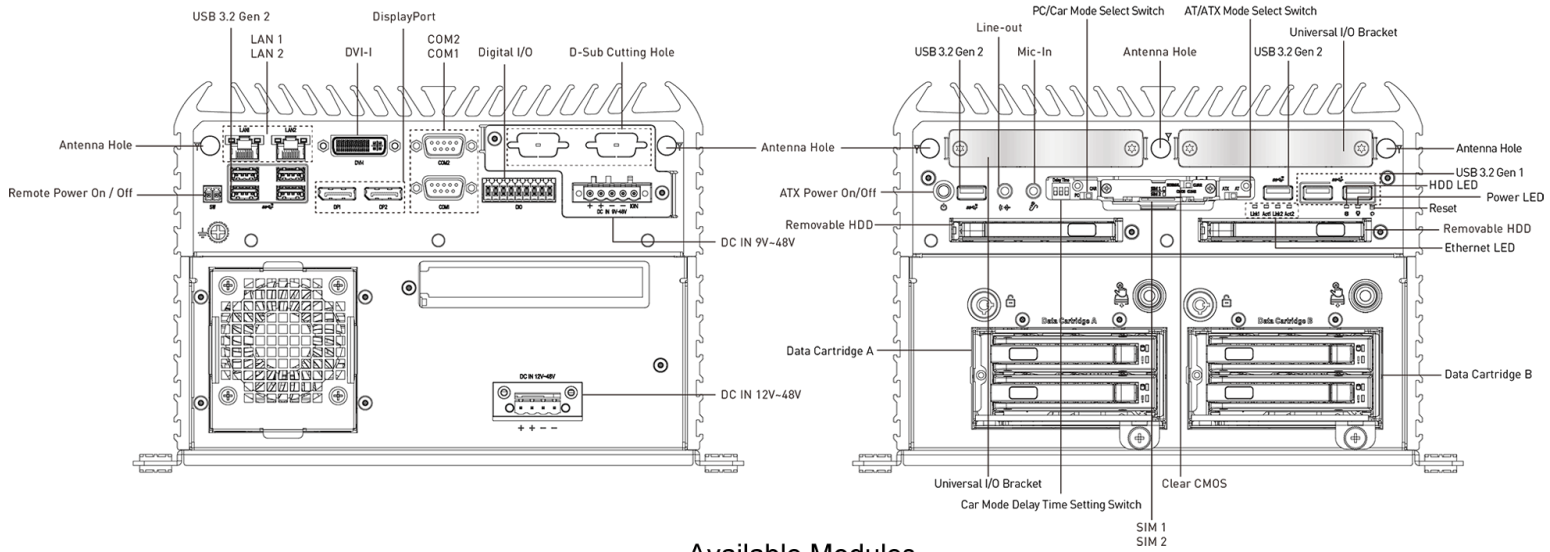
## Features

- 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 Hardware RAID 0, 1, 5, 6, 10 support (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

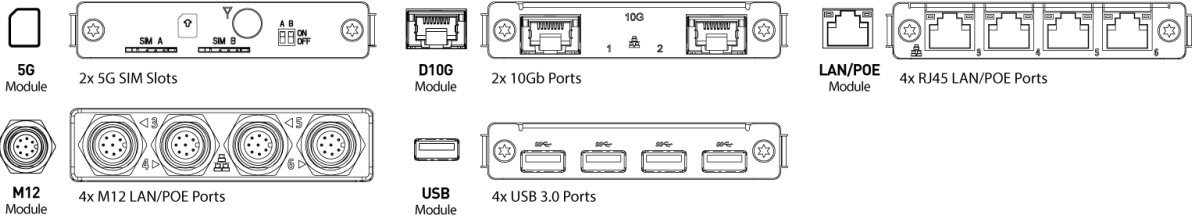
## Specifications

System		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)
Processor		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
Support 10th Gen Intel® CML S Processor (LGA 1200, 65W/35W TDP)			
-Intel® Xeon® W-1290TE, 10 Cores, 20MB Cache, up to 4.5 GHz			
-Intel® Xeon® W-1270TE, 8 Cores, 16MB Cache, up to 4.4 GHz			
-Intel® Xeon® W-1250TE, 6 Cores, 12MB Cache, up to 3.8 GHz			
-Intel® Core™ i9-10900E, 10 Cores, 20MB Cache, up to 4.7 GHz			
-Intel® Core™ i9-10900TE, 10 Cores, 20MB Cache, up to 4.5 GHz			
-Intel® Core™ i7-10700E, 8 Core, 16MB Cache, up to 4.5 GHz			
-Intel® Core™ i7-10700TE, 8 Cores, 116MB cache, up to 4.4 GHz			
-Intel® Core™ i5-10500T, 6 Cores, 12MB Cache, up to 4.2 GHz			
-Intel® Core™ i5-10500TE, 6 Core, 12MB Cache, 3.7 GHz			
-Intel® Core™ i3-10100T, 4 Cores, 6MB cache, up to 3.8 GHz			
-Intel® Core™ i3-10100TE, 4 Cores, 9MB Cache, up to 3.6 GHz			
System Chipset		Intel® W480E Chipset	
LAN Chipset		GbE1: Intel I219 (Support Wake-on-LAN and PXE) GbE2: Intel I210 (Support Wake-on-LAN and PXE)	
Audio Codec		Realtek ALC888S	
System Memory		2x 260-Pin DDR4 2666 /2933MHz SODIMM. Max. up to 64GB (ECC and Non-ECC)	
Graphics		Intel® UHD Graphics 630	
BIOS		AMI 256Mbit SPI BIOS	
Watchdog		Software Programmable Supports 1~255 sec. System Reset	
TPM		TPM 2.0	
Display			
Display Port		2x DisplayPort, support resolution 4096 x 2304, DP++	
DVI		1x DVI-I, support resolution 1920 x 1200	
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 Hardware RAID 0, 1, 5, 6, 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, Occupied by Raid Card)	
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	
Universal I/O Bracket		2x Universal I/O Bracket (By mini PCIe interface)	
		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)	
		Power Mode	
		AT, ATX	
		Power Ignition Sensing	
		Power Ignition Management	
		Power Supply Voltage	
		2x Power Input 9~48VDC 12~48VDC for NVMe EDGEboost Node	
		Power Connector	
		5-pin Terminal Block 4-pin Terminal Block for NVMe EDGEBoost Node (12V requires 4-pin terminal block)	
		Power Protection	
		OVP (Over Voltage Protection); OCP (Over Current Protection) Reverse Protection	
Environment			
		Operating Temperature	
		-25°C to 60°C (35W/65W CPU)	
		Storage Temperature	
		-30°C to 85°C	
		Relative Humidity	
		10% to 95% (non-condensing)	
		Certification	
		CE, FCC Class A	
		Vibration	
		With SSD: 3 Grms, 5 - 500 Hz, 0.5 hr/axis With HDD: 1 Grms, 5 - 500 Hz, 0.5 hr/axis	
		Shock	
		With SSD: 20G, half sine, 11ms	
Physical			
		Dimensions	
		240 (W) x 261 (D) x 166.9 (H) mm	
		Weights	
		10.2 kg	
		Construction	
		Extruded Aluminum with Heavy Duty Metal	
		Mounting Options	
		Wall Mounting	
		* 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

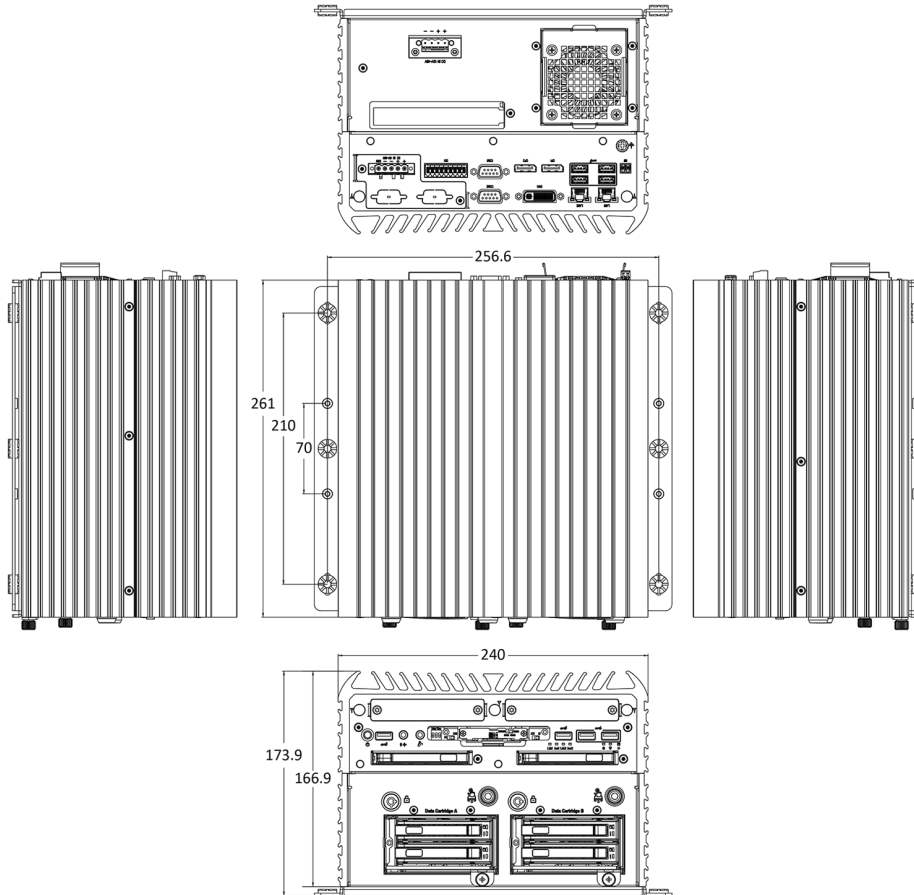


## Available Modules



## Dimension

Unit: mm



## Available Models

Model No.	Description
RCO-6000-CML-4NH	AI Edge Inference Computer w/ LGA 1200 for Intel 10th Gen Processor and W480E PCH, 4x U.2 15mm NVMe, Hardware 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-4NH  
1x Wall Mount Kit  
1x Accessory Kit  
1x DVI to VGA Adapter