



AI EDGE INFERENCE COMPUTER

RCO-6000-CML-2060S

AI Edge Inference Computer with LGA 1200 for Intel 10th Gen Processor and W480E PCH, RTX 2060 Super integrated



Features

- LGA 1200 socket for 10th Gen. Intel® CML S Processor
- Intel® W480E chipset
- NVIDIA GeForce® RTX 2060 Super Graphics engine based on NVIDIA Turing™ GPU architecture
- 2x 260-pin DDR4 SODIMM. Max. up to 64GB
- 2x Intel® GbE supporting Wake-on-LAN and PXE
- 3x 2.5" SATA HDD Bay (1x Internal) with RAID 0, 1, 5 support
- 1x M.2 (E Key, PCIe x1, USB 2.0, 2230), 2x SIM socket
- 9 to 48VDC Wide Range Power Input Supporting AT/ATX Mode
- Wide Operating Temperature -25°C to 60°C (35W CPU)
- Power ignition management
- TPM 2.0 Supported
- Edge AI Ready with Hailo-8™ (26 TOPS / 2.5W)
- UL Listed

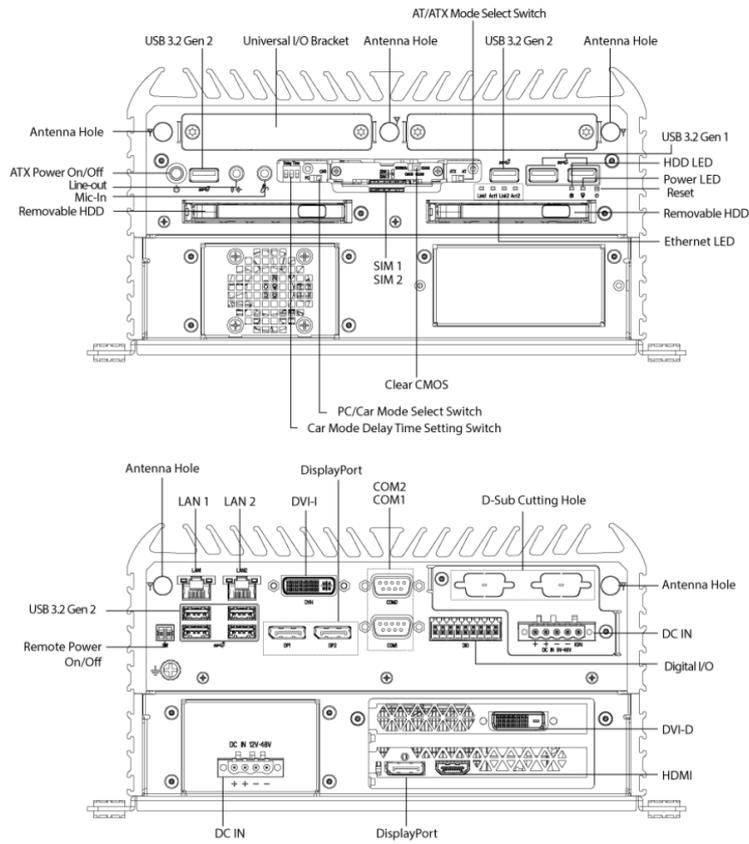
Specifications

System	
Processor	Support 10th Gen Intel® CML S Processor (LGA 1200, 35W TDP) - Intel® Xeon® W-1290TE, 10 Cores, 20MB Cache, up to 4.5 GHz - Intel® Core™ i9-10900TE, 10 Cores, 20MB Cache, up to 4.5 GHz - Intel® Core™ i7-10700TE, 8 Cores, 16MB cache, up to 4.4 GHz - Intel® Core™ i5-10500TE, 6 Core, 12MB Cache, 3.7 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 610/630 or NVIDIA GeForce® RTX 2060 Super
BIOS	AMI 256Mbit SPI BIOS
Watchdog	Software Programmable Supports 1~255 sec. System Reset
AI Accelerator	Supports 4x Hailo-8™ modules
TPM	TPM 2.0
Display	
Display Port	3x DisplayPort
DVI	1x DVI-I, 1x DVI-D
HDMI	1x HDMI
Multiple Display	6 Display interfaces
Storage	
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	
M.2	1x M.2 (E Key, PCIe x1, USB 2.0, 2230)
Mini PCIe	2x Full-size Mini PCIe
PCIe	1x PCIe x16 (occupied by GPU)
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)
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)
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

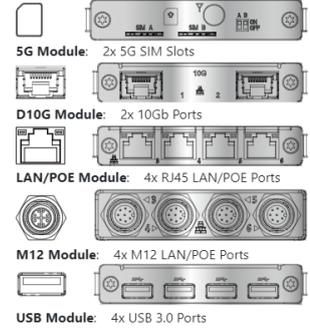
Operating System	
Windows	Windows 10/11
Linux	Linux kernel
Power	
Power Adapter	Optional AC/DC 24V/5A, 120W Optional AC/DC 24V/9.2A, 220W Optional AC/DC 24V/11.67A, 280W (For GPU Expansion)
Power Mode	AT, ATX
Power Ignition Sensing	Power Ignition Management
Power Supply Voltage	2x Power Input 9~48VDC 12~48VDC for GPU/Card Expansion
Power Connector	5-pin Terminal Block 4-pin Terminal Block for GPU Expansion
Power Protection	OVP (Over Voltage Protection) OCP (Over Current Protection) Reverse Protection
Environment	
Operating Temperature	-25°C to 60°C (35W CPU)
Storage Temperature	-30°C to 85°C
Relative Humidity	10% to 95% (non-condensing)
Certification	UL 62368 Ed. 3, 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 126.8 (H) mm
Weights	6.2 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

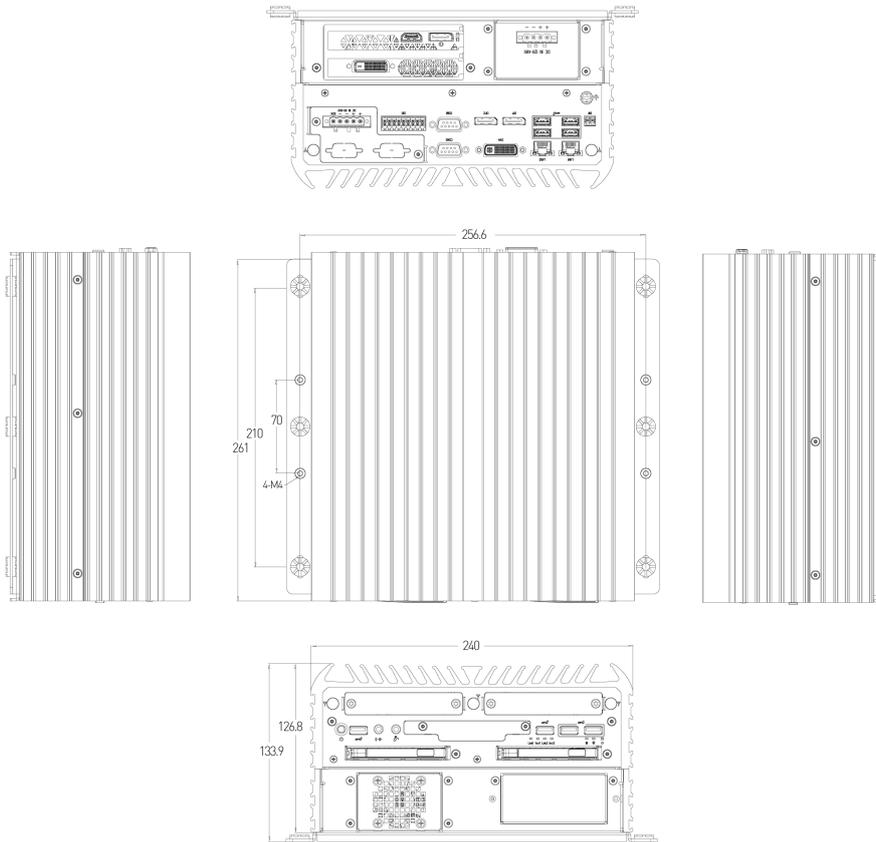


Available Modules



Dimension

Unit: mm



Available Models

Model No.	Description
RCO-6000-CML-2C-2060S-P	AI Edge Inference Computer w/ LGA 1200 for Intel 10th Gen Processor and W480E PCH, RTX 2060 Super integrated

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
999930	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 Series Embedded System
 1x Wall Mount Kit
 1x Accessory Kit
 1x DVI to VGA Adapter

Compatible GPU AVL

Model	RAM	CUDA Cores	TDP	TOPS/TFLOPS	Displays	System Interface	Form Factor
NVIDIA T1000	8G	896	50W	5.3 TFLOPS	4x mDP	PCIe 3.0 x16	2.7" H x 6.1" L, Low-Profile Single Slot
NVIDIA RTX A1000	8G	2304	50W	6.74 TFLOPS	4x mDP	PCIe 4.0 x8	2.7" H x 6.4" L, Single slot
NVIDIA RTX A2000	12G	3328	70W	7.99 TFLOPS	4x mDP	PCIe 4.0 x16	2.7" H x 6.6" L, Low Profile, Dual Slot
NVIDIA RTX 2000 ADA	16G	2816	70W	12 TFLOPS	4x mDP	PCIe 4.0 x8	2.7" H x 6.6" L, Dual slot
NVIDIA RTX 4000 SFF ADA	20G	6144	70W	19.2 TFLOPS	4x mDP	PCIe 4.0 x16	2.7" H x 6.6" L, Low Profile, Dual Slot

Compliances and Standards

Vibration	With SSD: 3 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-810G Method 514.7 Procedure I
Shock	With SSD: 20G, half sine, 11ms IEC60068-2-27:2008 Designed to comply with MIL-STD-810G Method 516.7 Procedure I
Operating Temperature	-25°C to 60°C (35W CPU) 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

Exports And Tariff Codes

ECCN	5A992.c
HTS	8471.50.0150
ScheduleB	84.71