



AI EDGE INFERENCE COMPUTER

RCO-6000-CFL-2060S

AI Edge Inference Computer with 9th Gen Intel Core Processor and Q370 PCH, RTX 2060 Super Integrated



Features

- LGA 1151 socket for 9th Gen. Intel® CFL-R S Processor Pentium® / Celeron® Desktop Processor
- Intel® Q370 chipset
- NVIDIA GeForce® RTX 2060 Super Graphics engine based on NVIDIA Turing™ GPU architecture
- 2x 260-pin DDR4 SODIMM. Max. up to 64GB
- 6 Display interface supported by 1x DVI-I, 1x DVI-D, 3x DisplayPort, 1x HDMI
- 2x Intel® GbE supporting Wake-on-LAN and PXE
- 4x 2.5" SATA HDD Bay and 2x mSATA with RAID 0, 1, 5, 10 support
- 1x M.2 (M Key, NVMe PCIe x4, 2280); 1x M.2 (E Key, PCIe x2, 2230, USB 2.0, Support CNVi), 2x SIM socket
- 9 to 48VDC Wide Range Power Input Supporting AT/ATX Mode
- Wide Operating Temperature (-25°C to 60°C)
- Power ignition management



Specifications

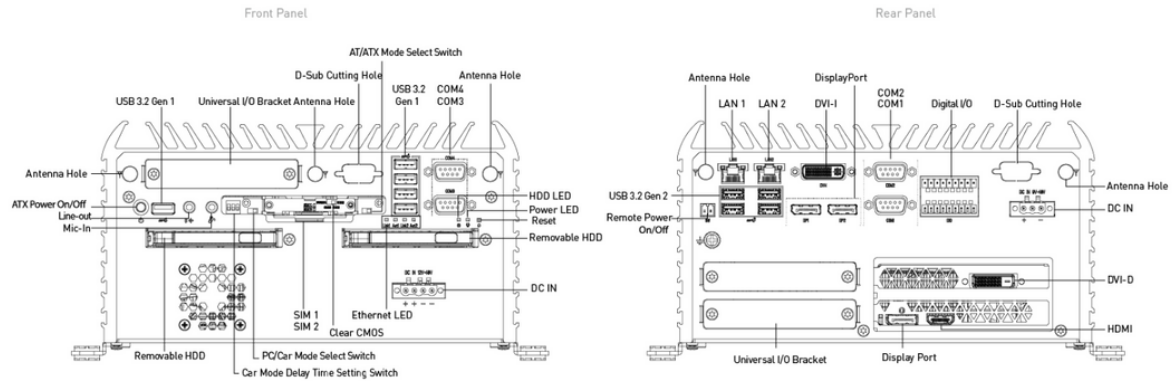
System		Power	
Processor	Support 9th Gen Intel® Core™ CFL-R S Processor (LGA 1151, 35W TDP) - Intel® Core™ i7-9700TE, 8 Cores, 12MB cache, up to 3.8 GHz - Intel® Core™ i5-9500TE, 6 Cores, 9MB Cache, up to 3.6 GHz - Intel® Core™ i3-9100TE, 4 Core, 6MB Cache, 3.2 GHz	Power Adapter	Optional AC/DC 24V, 220W/280W Optional AC/DC 24V, 220W for GPU
System Chipset	Intel® Q370 Express Chipset	Power Mode	AT, ATX
LAN Chipset	GbE1: Intel I219LM (Support Wake-on-LAN and PXE) GbE2: Intel I210-AT (Support Wake-on-LAN and PXE)	Power Ignition Sensing	Power Ignition Management
Audio Codec	Realtek ALC888S	Power Supply Voltage	9~48VDC 12~48VDC for GPU
System Memory	2x 260-Pin DDR4 2400/2666MHz SODIMM. Max. up to 64GB	Power Connector	3-pin Terminal Block, 3-pin or 4-pin Terminal Block for GPU (12V requires 4-pin terminal block)
Graphics	Intel® UHD Graphics 610/630 or NVIDIA GeForce® RTX 2060 Super	Power Protection	Over-Voltage Protection (OVP) Over-Current Protection (OCP) Reverse Polarity Protection (RPP)
BIOS	AMI 256Mbit SPI BIOS	Environment	
Watchdog	Software Programmable Supports 1~255 sec. System Reset	Operating Temperature	-25°C to 60°C (35W CPU)
TPM	TPM 2.0	Storage Temperature	-30°C ~ 85°C
Display		Relative Humidity	10% to 95% (non-condensing)
Display Port	3x DP	Certification	CE, FCC Class A, E-Mark, EMC Conformity with EN 50155, EN 50121-3-2
DVI	1x DVI-I, 1x DVI-D	Vibration	3 Grms, 5 ~ 500 Hz, 0.5 hr/axis (SSD) 1 Grms, 5 ~ 500 Hz, 0.5 hr/axis (HDD)
HDMI	1x HDMI	Shock	20G, half-sine, 11 ms (SSD)
Multiple Display	6 Display Interfaces	Physical	
VGA	Yes (by optional split cable)	Dimensions	240 (W) x 261 (D) x 127.2 (H) mm
Storage		Weights	9.5 -10.4kg
M.2	1x M.2 (M Key, NVMe PCIe x4, 2280) 1x M.2 (E Key, PCIe x2, 2230, USB 2.0, Support CNVi)	Construction	Extruded aluminum with heavy duty metal
mSATA	1x mSATA (shared by 1x Mini PCIe)	Mounting Options	Wall Mounting
SIM Socket	2x External SIM socket		
SSD/HDD	2x Internal 2.5" SATA HDD Bay (support H=9mm) 2x Hotswap 2.5" SATA HDD Bay (support H=7mm) Support RAID 0, 1, 5, 10		
Expansion			
Mini PCIe	2x Full-size Mini PCIe (1x Shared with mSATA)		
PCIe	1x PCIe x16		
Expansion Modules			
• 4-port GbE module with Intel® I350-AT4 Chipset, RJ-45 or M12 connector (PoE optional)			
• 2-Port RJ45 10GbE with Intel X710-AT2 Chipset			
• 4-Port USB with Renesas uPD720201K8 host controller			
• 1x M.2 for 5G (B Key, PCIe x4, USB 3.0, 3042/3052) Including 2x SIM socket, 1x SIM switch			
I/O			
Audio	1x Mic-in, 1x Line-out		
COM	4x RS-232/422/485 ; 2x RS-232/422/485 (internal)		
DIO	8 in / 8 out (Isolated)		
LAN	2x RJ45		
Universal I/O Bracket	3x Universal I/O Bracket (By mini PCIe interface)		
USB	4x USB 3.2 Gen 2 (10Gbps) 5x USB 3.2 Gen 1 (5 Gbps) 1x USB 3.2 Gen 1 header (5 Gbps, 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		
Operating System			
Windows	Windows 10		
Linux	Linux kernel 5.X		

* For 8th/9th CPUs configured to run at 65W, operating temperatures will be limited to 60°C.

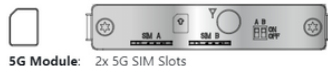
** 65W CPUS may experience thermal throttling depending on extreme application workloads; this is also due to an increase in the physical CPU cores from the Intel silicon (up to 8 cores). Please note, this does not indicate system malfunction or problems in the fanless design. Please consult our embedded 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



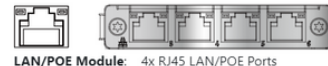
Available Modules



5G Module: 2x 5G SIM Slots



D10G Module: 2x 10Gb Ports



LAN/POE Module: 4x RJ45 LAN/POE Ports



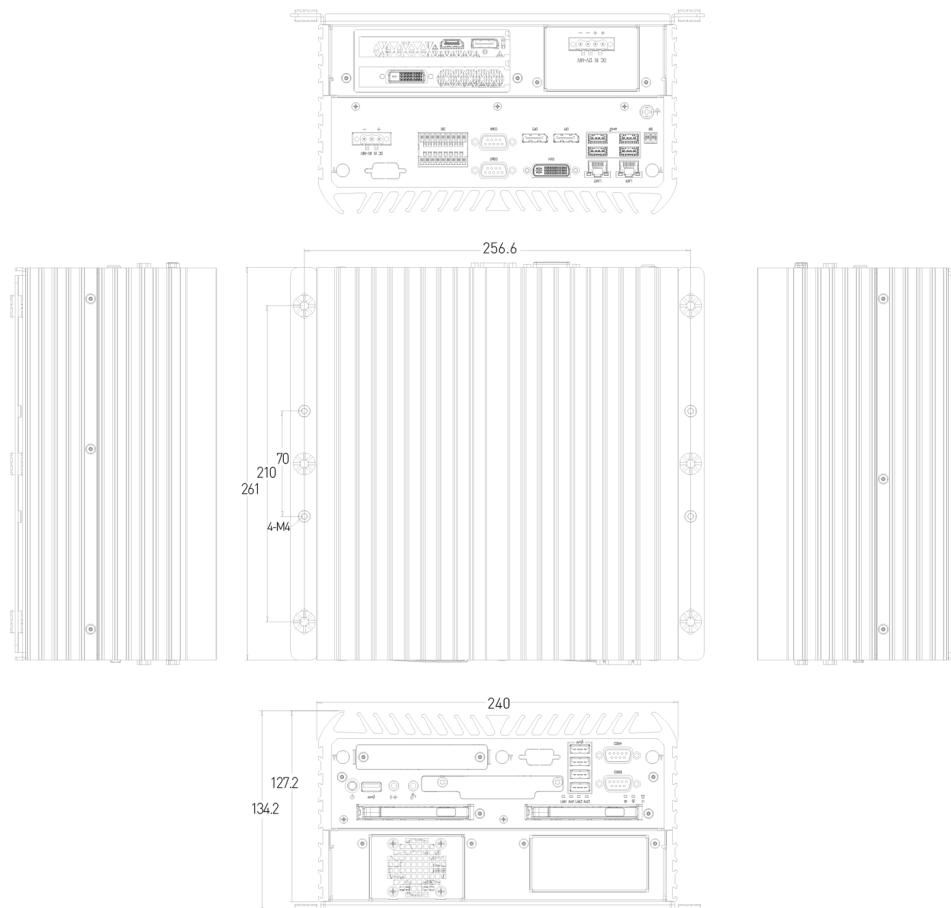
M12 Module: 4x M12 LAN/POE Ports



USB Module: 4x USB 3.0 Ports

Dimension

Unit: mm



Compliances and Standards

Shock	20G, half-sine, 11 ms (SSD) IEC60068-2-27:2008 Designed to comply with MIL-STD-810H Method 516.8 Procedure I
Vibration	3 Grms, 5 ~ 500 Hz, 0.5 hr/axis (SSD) 1 Grms, 5 ~ 500 Hz, 0.5 hr/axis (HDD) IEC60068-2-64:2008 Designed to comply with MIL-STD-810H Method 514.8 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)
EMI	- FCC Class A (47 CFR part 15.109 and part 15.107) - CE - ICES-003 - UKCA

Available Models

Model No.	Description
RCO-6000-CFL-2C-2060S-P	AI Edge Inference Computer with 9th Gen Intel® Core™ Processor, Q370 PCH, RTX 2060S Integrated, w/ Power Adapter

Optional Accessories

Model No.	Description
1-E09A22801	Adapter AC/DC 24V/11.67A 280W 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
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-CFL-2060S
- 1x Utility DVD Driver
- 1x Wall Mount Kit
- 1x DVI to VGA Adapter

US Exports And Tariff Codes

ECCN	5A992.c
HTS	8471.50.0150
ScheduleB	84.71

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