



MACHINE VISION COMPUTER

VCO-6000-RPL-4E-4B7M-2PWR

Machine Vision Computer w/ LGA 1700 for Intel 12/13/14th Gen CPU & R680E PCH, 3 PCIe, 6x HDD, 2x Power input

Features

- LGA 1700 socket for 12/13/14th Gen. Intel® ADL & RPL Processor (65W/35W TDP)
- Intel® R680E chipset
- 2x DDR5 4800/5600MHz SODIMM. Max. up to 64GB
- Triple Independent Display: 2x DisplayPort, 1x DVI-I
- 2x Intel® 2.5GbE supporting Wake-on-LAN and PXE
- 1x Full-size Mini PCIe (1x shared by 1x mSATA), 2x SIM socket
- 6x 2.5" SATA HDD Bay (1x Internal)
- 1x M.2 (E Key, PCIe x1, USB 2.0, 2230)
- 1x M.2 (B Key, 2242/3042/3052, PCIe x2, Support AI Module/NVMe Storage, PCIe x1 & USB 3.2 Gen1, Support 4G/5G)
- 6x RS-232/422/485 (4x internal), 4x USB 3.2 Gen 2, 5x USB 3.2 Gen 1 (internal)
- 8x DI + 8x DO with isolation
- 9 to 48VDC Wide Range Power Input Supporting AT/ATX Mode
- 12 to 48VDC (For GPU/Card Expansion)
- Wide Operating Temperature: -25°C to 70°C (35W CPU); -25°C to 60°C (65W CPU)
- TPM 2.0 Supported



Specifications

System		Others	4x 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 (internal) 1x 6CM FAN Module (Optional)
Processor			
Support 12/13/14th(Non-vPRO) Gen Intel® ADL & RPL Processor (LGA 1700, 65W/35W TDP)			
- Intel® Core™ i9-14900/i9-13900E/i9-12900E, 65W			
- Intel® Core™ i9-14900T/i9-13900TE/i9-12900TE, 35W			
- Intel® Core™ i7-14700/i7-13700E/i7-12700E, 65W			
- Intel® Core™ i7-14700T/i7-13700TE/i7-12700TE, 35W			
- Intel® Core™ i5-14500/i5-13500E/i5-12500E, 65 W			
- Intel® Core™ i5-14500T/i5-13500TE/i5-12500TE, 35W			
- Intel® Core™ i3-13100E/i3-12100E, 60W			
- Intel® Core™ i3-14100T/i3-13100TE/i3-12100TE, 35W			
- Intel® Core™ 300T, 35W			
- Intel® Pentium® G7400E, 46W / G7400TE, 35W			
- Intel® Celeron® G6900E, 46W / G6900TE, 35W			
System Chipset		Operating System	
Intel® R680E Express Chipset		Windows 10/11	
LAN Chipset		Linux kernel	
2.5 GbE1: Intel I226, 2.5 GbE2: Intel I226, Support Wake-on-LAN and PXE, Support TSN			
Audio Codec		Power	
Realtek ALC888S		Power Adapter	
System Memory		Optional AC/DC 24V/9.2A, 220W Optional AC/DC 24V/11.67A, 280W (for more advanced CPU or as second power supply for GPU/Card Expansion) Optional AC/DC 24V/15A, 360W (for more advanced i7/i9 CPU)	
2x 262-Pin DDR5 4800/5600MHz SODIMM. Max. up to 64GB (ECC and Non-ECC)		Power Mode	
Graphics		AT, ATX	
Intel® UHD Graphics 770/710		Power Ignition Sensing	
BIOS		Power Ignition Management	
AMI 256Mbit SPI BIOS		Power Supply Voltage	
Watchdog		• 9~48VDC • 12~48VDC (For GPU/Card Expansion)	
Software Programmable Supports 1~255 sec. System Reset		Power Connector	
TPM		5-pin Terminal Block 4-pin Terminal Block	
TPM 2.0		Power Protection	
		OVP (Over Voltage Protection) OCP (Over Current Protection) Reverse Protection	
		Environment	
Display		Operating Temperature	
Display Port		-25°C to 70°C (35W CPU) -25°C to 60°C (65W CPU)	
2x DisplayPort, Support resolution 5120 x 3200, Up to 7680 x 4320		Storage Temperature	
DVI		-30°C to 85°C	
1x DVI-I, support resolution 1920 x 1200		Relative Humidity	
Multiple Display		10% to 95% (non-condensing)	
Triple Display		Certification	
VGA		UL 62368 Ed. 3, CE, FCC Class A	
Yes (by optional split cable)		Vibration	
		IEC60068-2-64:2008 With HDD: 1 Grms (5 - 500 Hz, 0.5 hr/axis) With SSD: 3 Grms (5 - 500 Hz, 0.5 hr/axis) Designed to comply with MIL-STD-810G Method 514.7 Procedure I	
		Shock	
		IEC60068-2-27:2008 With SSD: 20G half-sin 11ms Designed to comply with MIL-STD-810G Method 516.7 Procedure I	
		Physical	
		Dimensions	
		177 (W) x 340 (D) x 240 (H) mm	
		Weights	
		10.5 KG	
		Construction	
		Extruded Aluminum with Heavy Duty Metal	
		Mounting Options	
		Wall Mounting	
Expansion			
Mini PCIe			
1x Full-size Mini PCIe (1x shared by 1x mSATA)			
PCIe			
2x PCIe x16 Slot (x8 Lane, Gen 4) 1x PCIe x4 (x1 Lane, Gen 3)			
Card Dimension			
310 (L) x 112 (H) mm			
I/O			
COM			
2x RS-232/422/485 ; 4x 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			
4x USB 3.2 Gen 2 (10 Gbps) 5x USB 3.2 Gen 1 (5 Gbps, Internal) 1x USB 3.2 Gen 1 header (5 Gbps, internal)			

* For 12/13/14th 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 24 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.

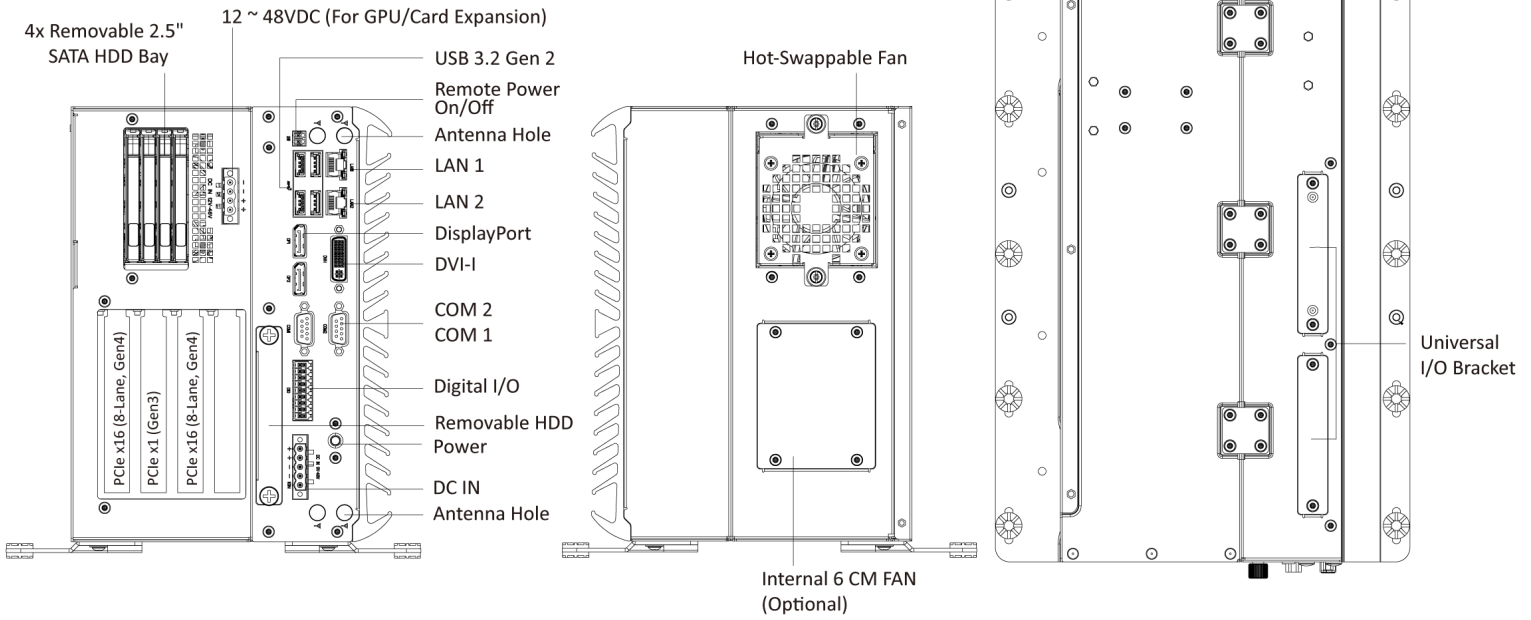
* All specifications and photos are subject to change without notice.

External I/O Mechanical Layout

Front Panel

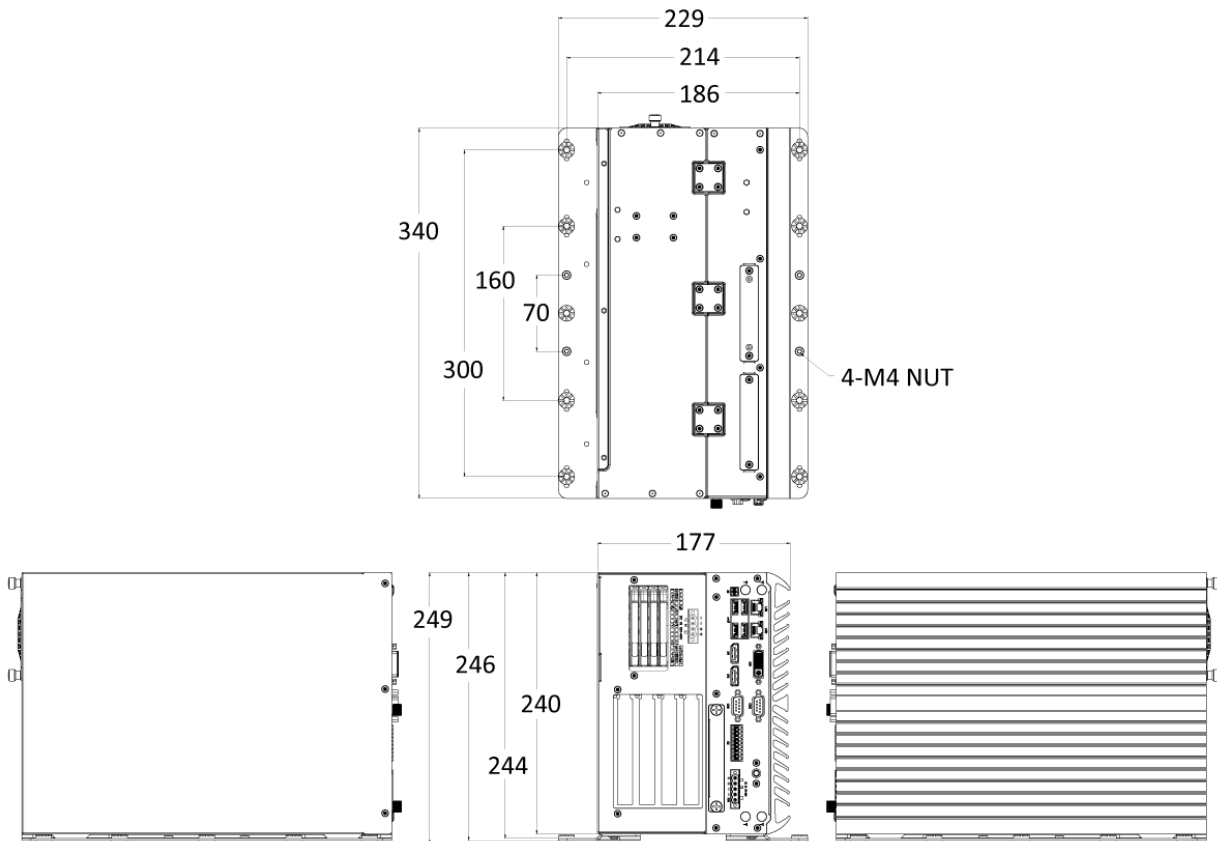
Rear Panel

Top Panel



Dimension

Unit: mm



Available Models

Model No.	Description
VCO-6000-RPL-4E-4B7M-2PWR	Machine Vision Computer w/ LGA 1700 for Intel 12/13/14th Gen CPU & R680E PCH, 3x PCIe, 6x HDD, 2x Power input

Optional Accessories

Model No.	Description
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
1-E09A36001	Adapter AC/DC 24V/15A 360W 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
3-RC6300EXFAN	External Double FAN KIT

Packing List

1x VCO-6000-RPL-4E-4B7M-2PWR Embedded System
1x Wall Mount Kit
1x Accessory Kit
1x DVI to VGA Adapter