

# VC300-CS C246 Q370

8th/9th Gen Intel® Core™  
AI-Enabled In-Vehicle Embedded System



## KEY FEATURES



### High Performance CPU

Intel® Coffee Lake Xeon/Core i7 processor



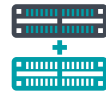
### Four 802.3af POE Ports

4 x RJ45 type PoE ports at 15W



### AI Accelerated

Up to 110W GPU MXM module supported



### Scalability

Multiple expansion slots for 3G/LTE/5G cellular support



### Support 5G Communication

Support 5G communication

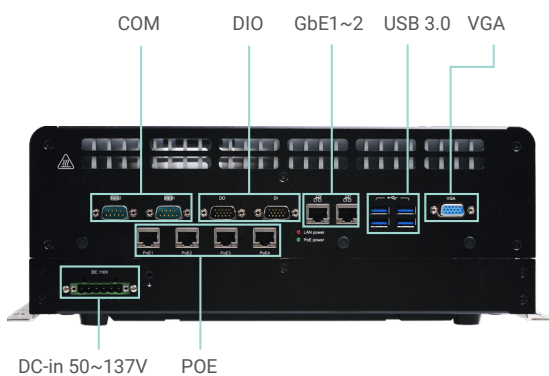


### Wide-Temperature

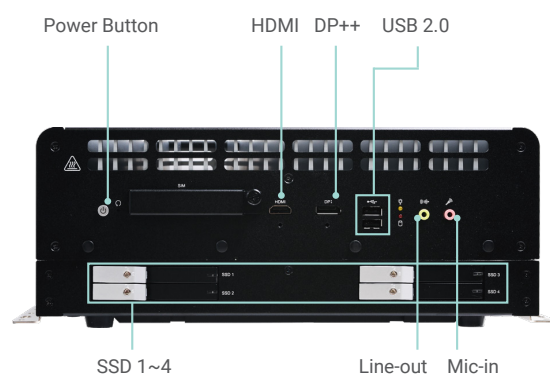
-25°C to 70°C operation without active fan



## PANEL

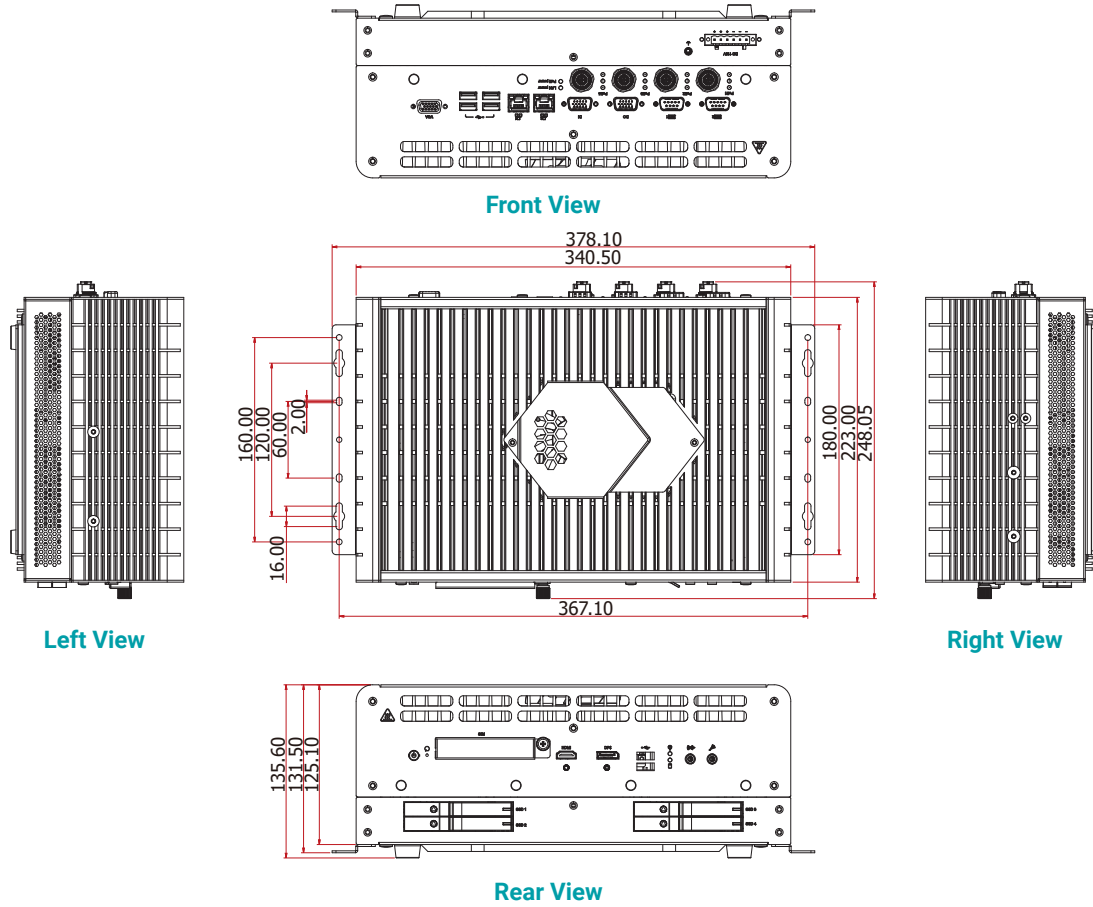


Front View

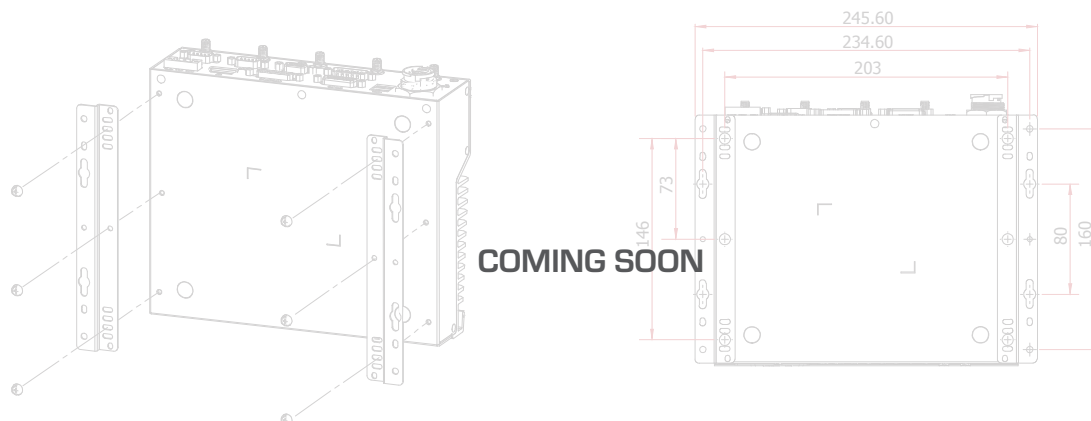


Rear View

**DIMENSIONS**



**WALL MOUNTING**



## SPECIFICATION

SYSTEM	Processor	8th/9th Generation Intel® Core™ Processors, LGA 1151 - Xeon E-2278GE 8C/16CT 3.3GHz 16MB Cache, TDP 80W, with ECC with C246 PCH - Xeon E-2278GEL 8C/16CT 2.0GHz 16MB Cache, TDP 35W, with ECC with C246 PCH - Intel® Core™ i7-9700TE 8C/8T 1.8GHz 12MB cache, TDP 35W with Q370PCH - Intel® Core™ i7-8700T 6C/12T 2.4GHz 12MB cache, TDP 35W with Q370PCH - Intel® Core™ i7-9700E 8C/8T 2.6GHz 12MB cache, TDP 65W with Q370PCH - Intel® Core™ i5-9500TE 6C/6T 2.2GHz 9MB cache, TDP 35W with Q370PCH - Intel® Core™ i3-9100TE 4C/4T 2.2GHz 6MB cache, TDP 35W with ECC with C246PCH
	Chipset	Intel® C246/Q370 Chipset
	Memory	Dual Channel DDR4 2666/2400 MHz by SODIMMs up to 64GB
	BIOS	Insyde SPI 128Mbit
	GRAPHICS	Controller
	GPU	Support MXM 3.1 Type A & B: T3000, GTX 1050ti, GTX1060, GTX1070 GPU modules Maximum Package power 120W, inrush current 150W PCIe x16
	Display	1 x VGA (display out by DB15 connector)      VGA: resolution up to 1920x1200 @ 60Hz 1 x HDMI (with screw lock)                      HDMI: resolution up to 4096x2160 @ 24Hz 1 x DP++ (Standard Display Port Connector DIP type with screw lock) support NVIDIA Optimus technology      DP++: resolution up to 4096x2304 @ 60Hz
STORAGE	External	4 x Swappable 2.5" Storage Bay with Lock. Supports 7mm SSD devices
EXPANSION	Interface	1 x Half-size Mini PCIe for WiFi/BT Modules, with PCIe x1 & USB signal 2 x Full-size Mini PCIe support PCIe x1 & USB 2.0 signal with SIM of each (All SIM Cards can be external accessible with cover against vibration) 1 x M.2 B key support PCIe x1, USB2.0, USB3.0 signal with SIM slot (SIM card can be external accessible with cover) 1 x M.2 2280 M key supports 2242, 2260 & 2280 devices (PCIe x4 & SATA signal, support boot up function)
ETHERNET	Controller	5 x Intel® I210IT NIC (10/100/1000Mbps) 1 x Intel® I219LM PHY (10/100/1000Mbps)
	Interface	2 x RJ45 GbE 4 x M12 802.3af 15W PoE ports
LED	Indicators	1 x Power LED (Green) 5 x Storage LED (Red) 4 x POE LED
FRONT I/O	Ethernet	2 x GbE (RJ-45) support Wake on Lan
	Serial	2 x High speed full RS-232/422/485 by 2x DB-9
	DIO	2 x Isolated 8bits DIO port by 2x DB-15 female connectors Supports 8 DI & 8 DO 2KV isolation
	Display	1 x VGA display out by DB15 connector
	USB	4 x USB 3.0 (type A)
	Power-in	1 x 6Pins 5.0mm Terminal Block
	POE	4 x RJ45 802.3af POE by XCT7-4POE Support 802.11af, max 15.4W (PSE side) NOT support wake on Lan
	REAR I/O	USB
	Display	1 x HDMI 1 x DP++
	Audio	1 x Mic-in 1 x Line-out by 3.5mm 3P Phone Jack
	Buttons	1 x Power Button 1 x Reset Button
	SIM	3 x SIM sockets (external accessible with cover)
	Antenna Holes	7 x SMA type antenna hole for GNSS, WWAN/LTE MIMO, WLAN/ BT MIMO, 5G
WATCHDOG TIMER	Output & Interval	System Reset, Programmable via Software from 1 to 255 Seconds
SECURITY	TPM	TPM 2.0
POWER	Type	+12VDC (9~36V), +24VDC(14.4~33.6) +12V and +24V compliant to eMark with power ignition function Reverse polarity protection
	Connector	6 pin 5.0mm Terminal Block
OS SUPPORT	OS Support	Windows 10 IoT Enterprise 64 Bit Ubuntu 18.04

## SPECIFICATION

<b>MECHANISM</b>	<b>Construction</b>	Metal + Aluminum
	<b>Mounting</b>	Wall Mount
	<b>Dimensions (W x H x D)</b>	340.5(W) x 223(D) x 132(H) mm (3U height, excluding rubber foot)
	<b>Weight</b>	9.85 kg
<b>ENVIRONMENT</b>	<b>Operating Temperature</b>	-25°C to 70°C with when CPU+GPU<100W, up to +85°C for 10min -25°C to 55°C with when CPU+GPU<160W, up to +70°C for 10min CPU throttling at high temperature is acceptable
	<b>Storage Temperature</b>	-40 to 85°C
	<b>Relative Humidity</b>	10% to 90% (non-condensing)
<b>STANDARDS AND CERTIFICATIONS</b>	<b>Shock (SSD/HDD)</b>	EN61373: 2010, Category 1 Class A & Class B
	<b>Vibration</b>	EN61373: 2010, Category 1 Class B
	<b>IP rating</b>	IP40
	<b>Certification</b>	CE, FCC Class B (Tested with Adapter) E-Mark Safety: EN50153, EN50124-1 Fire Proof: EN45545

## PACKING LIST

1 VC300-CS system unit
1 Power connector
1 Mounting Bracket

## Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

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