

EVT310R-Series

Embedded Vehicle - Tiger Lake Computer Performance



Features

- 11th generation Intel® Core™ i3/i5/i7 Tiger Lake serie
- 2x 204-pin DDR4 SODIMM. Max up to 32GB
- 4x Ethernet Ports or PoE Ports with RJ45 or M12 connectors
- 9 to 48VDC wide range power input
- Power Ignition control
- -40°C to 70°C extended operating temperature with airflow

Specifications

CPU

- Intel® Core™ i5-1145GRE up to 4.1 GHz, Quad Core
- Intel® Core™ i7-1185GRE up to 4.4 GHz, Quad Core

Memory

- 2x 204-pin SODIMM socket
- Supports up to 32GB DDR4 3200 MHz unbuffered non-ECC

Graphic

- Integrated in CPU Intel® Iris® Xe Graphics (for i7/i5)
- Video ports: 1x DP1.4, 2x HDMI 2.0
- DP: resolution up to 4096x2304 @ 60Hz
- HDMI: resolution up to 4096x2304 @ 60Hz

Ethernet

- 4x Gigabit Ethernet i210IT Controller, RJ45 Connectors
Optional : M12 X-coded GbE Connectors
Optional : RJ45 or M12 X-coded with PoE (IEEE 802.3af)
- Support Wake-On-LAN/PXE

Storage / Drive Bay

- 2x 2.5" Removable HDD/SSD SATA Drive Bay
- 2x M.2 2280-D2-M slot PCIe x4

RAID

- Support RAID 1/0 2x 2.5" SATA
- Support RAID 1/0 M.2 2280 & M.2 2242 (PCIe x1)

TPM

- TPM 2.0

Operating System

- Windows 11 / Windows 10 Pro / Windows 10 IoT LTSC 1809

Expansion

- 1x Full-size Mini PCIe (USB 2.0 and SIM)
- 1x Full-size Mini PCIe (PCIe and USB 2.0)
- 1x M.2 3042/3052 slot (PCIe x1, USB 3.0 and USB 2.0 and SIM)
- 1 x M.2 2230-D2-E slot (PCIe x1 and USB 2.0)

I/O Ports

- 1x DP, 2x HDMI, 4xLAN, 2x USB 3.2 Gen2, 2x USB 2.0, COM 1/2 for RS232/422/485 with 3kVrms isolation, COM 3/4 for RS232 (optional replaceable with CAN ports)
1x Line-out/1xMic-in, 4x DI 4x DO isolated 3kVrms

Others I/O

- 7x Antenna Holes, 2x Nano SIM card slots

LED/Control

- 1x System LED, 1x HDD LED, 1x WWAN LED, 1x WLAN LED, 4x PoE LED
- Power On/Off Switch, 1x Remote On/Off, 1x Ground M3

Watchdog

- Selectable 1~255 sec.

Power Supply

- 9~48VDC
- Power Connector 3-pin Terminal Block
- Power Ignition control
- Optional: Power Adapter 90W for PoE 160W

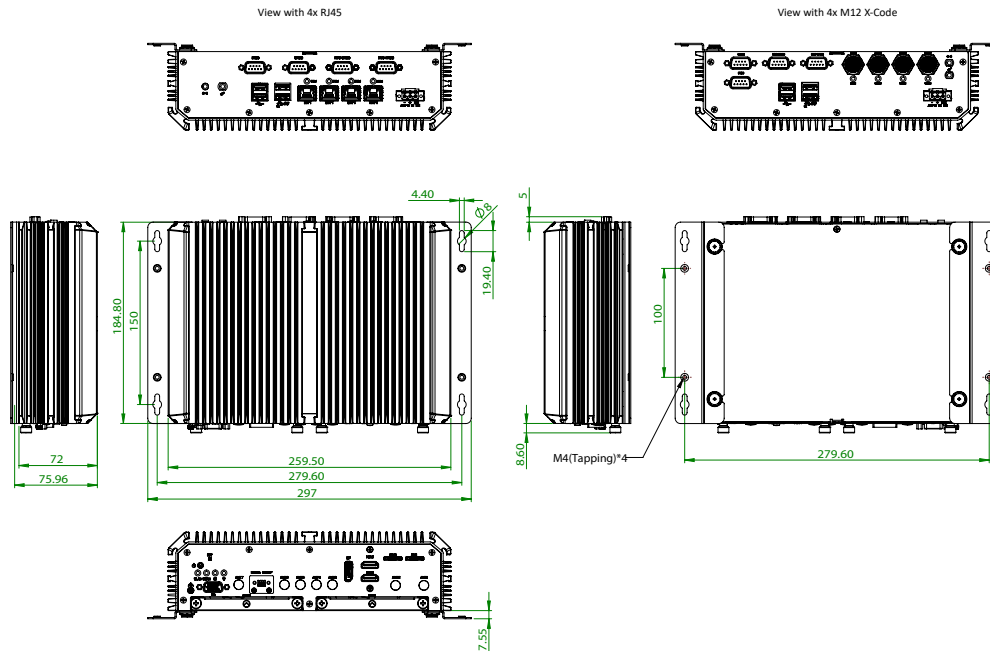
Mechanical / Cooling

- Fanless
- Extruded Aluminum
- Mounting: Wall-Mount, VESA-Mount 75x75, Optional DIN-Rail

Dimensions

- Dimension (W x D x H mm): 259.5 x 184.8 x 72 mm
- Weight: 3.2 kg

Dimension



Environment

- Operating Temperature: -40°C to 70°C
by use Industrial Grade SSD/ RAM & Ambient Air Flow
- Storage Temperature: -40°C to 85°C
- Relative Humidity 20% to 90% (non-condensing)
- Vibration Random: IEC60068-2-64, random, 2.5G@5~500Hz, 1hr/axis with SSD
- Vibration Operating: MIL-STD-810G, 514.6C Procedure 1, Category 4
- Vibration Storage: MIL-STD-810G, 514.6E Procedure 1, Category 24
- Shock Operating: MIL-STD-810G, 516.6 Procedure I, trucks and emi-trailers=40G
- Shock Non-Operating: MIL-STD-810G, 516.6, Procedure V, crash hazard shock test=100G

Certifications

- CE, FCC, E13

Ordering Information

[more configurations on request](#)

PN	Short Description
EVT310R-i5-4L	Vehicle Rugged Box PC, Intel i5-1145GRE CPU, 4x RJ45 LAN, 2x2.5" SATA (RAID 0/1)
EVT310R-i5-4P	Vehicle Rugged Box PC, Intel i5-1145GRE CPU, 4x PoE RJ45 LAN (IEEE 802.3af), 2x2.5" SATA (RAID 0/1)
EVT310R-i5-4PM12	Vehicle Rugged Box PC, Intel i5-1145GRE CPU, 4x PoE M12 X-Code LAN (IEEE 802.3af), 2x2.5" SATA (RAID 0/1)
EVT310R-i7-4L	Vehicle Rugged Box PC, Intel i7-1185GRE CPU, 4x RJ45 LAN, 2x2.5" SATA (RAID 0/1)
EVT310R-i7-4P	Vehicle Rugged Box PC, Intel i7-1185GRE CPU, 4x PoE RJ45 LAN (IEEE 802.3af), 2x2.5" SATA (RAID 0/1)
EVT310R-i7-4PM12	Vehicle Rugged Box PC, Intel i7-1185GRE CPU, 4x PoE M12 X-Code LAN (IEEE 802.3af), 2x2.5" SATA (RAID 0/1)

Optional Accessories

- iRACC-EVT310-0924V AC/DC 24V 90W 3-pin Terminal Block Plug
- iRACC-EVT310-1624V AC/DC 24V 160W 3-pin Terminal Block Plug
- LTE 4G or 5G Modem
- GPS with Dead Reckoning
- CAN Bus 2.0B
- Wi-Fi, BT
- VESA mount Kit
- DIN Rail mount kit