

VC700-ASL



Intel Atom® Processor Amston Lake Series
Fanless in-vehicle system with ultra compact

ITXPT



KEY FEATURES



Intel ATOM X7000RE Wide Temperature Series

Support WIN 11 and Linux



9-axis IMU Sensor

3 Accelerometer + 3 Gyroscope +
3 Magnetometer



Rich I/O Connectivity

2 M12 GbE, 2 COM, 2 CAN Bus, 8bit DIO,
4 USB 3.2



Wide-Voltage

9~36V vehicle power input with ACC/IGN
function



Wide-Temperature

-40°C~70°C operation without active fan



PANEL

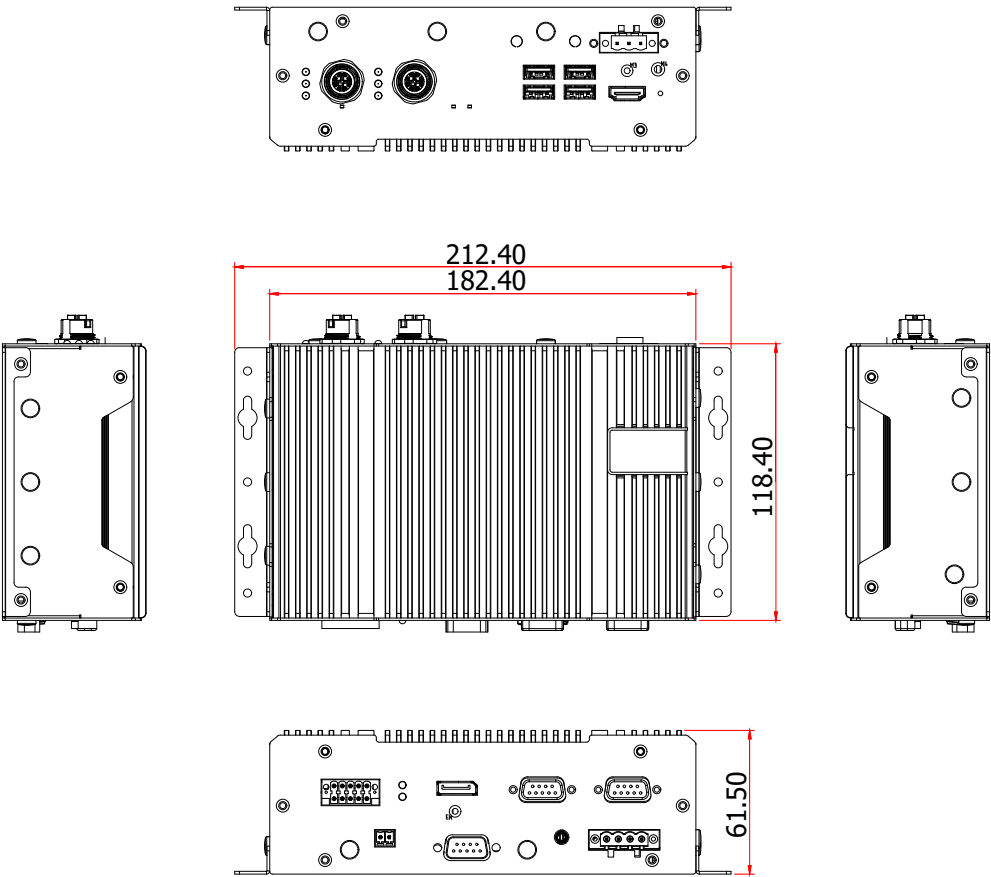


Front View

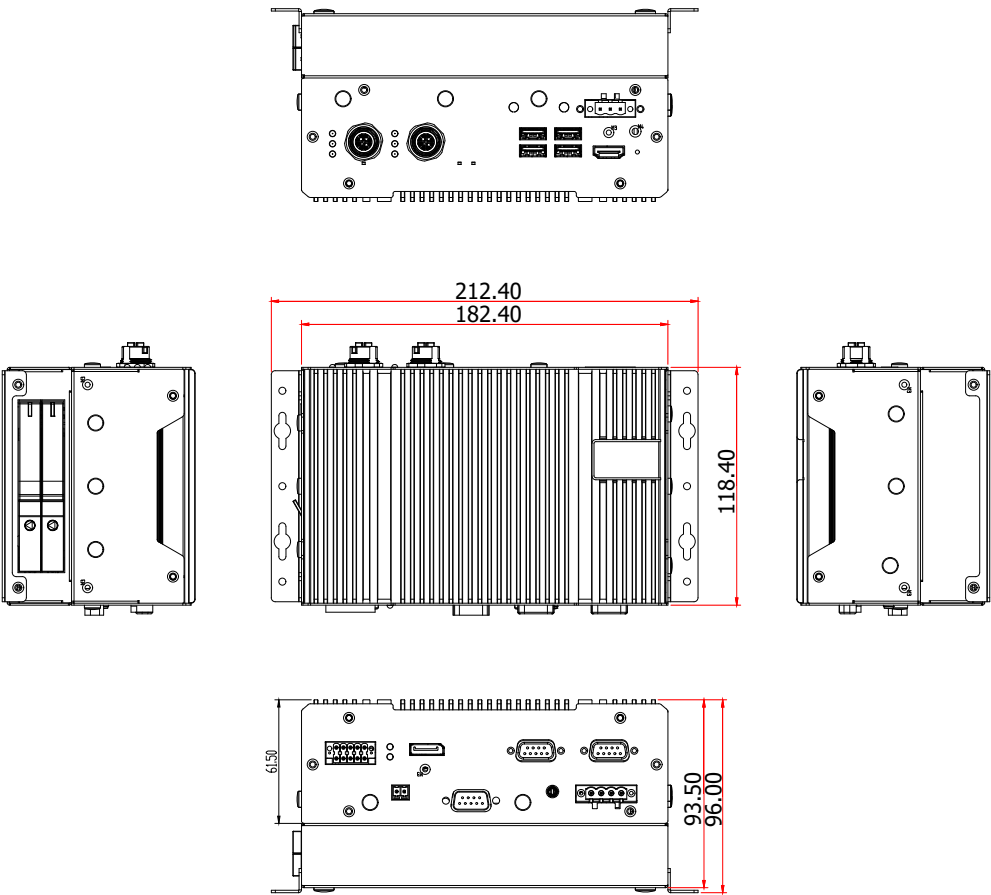


Rear View

DIMENSIONS



DIMENSIONS: 2 x 2.5 inch SSD drive bays



SPECIFICATION

SYSTEM	Processor	Intel® Atom X7000RE processors (Code Name : Amston Lake) Intel® Atom Processor x7835RE, 8 Cores, 1.3~3.6GHz, 12W Intel® Atom Processor x7433RE, 4 Cores, 1.5~3.4GHz, 9W Intel® Atom Processor x7211RE, 2 Cores, 1.0~3.2GHz, 6W
	Memory	4GB/8GB LPDDR5 5200 Memory down
	BIOS	AMI SPI 64Mbit
	Controller	Intel® HD Graphics
GRAPHICS	Feature	Execution Units: Up to 32 Eus
		3D API: Open GL 4.6, DirectX12, Vulkan 1.2 (Windows) / Mesa 3D,OpenGL 4.6, Vulkan 1.2 (Linux)
		Precision: FP32, FP16, INT8
		Compute: OpenCL 3.0
STORAGE	Display	1 x HDMI 1.4b (resolution up to 4096x2160 @ 24Hz) 1 x DP++ (resolution up to 4096x2160@24Hz)
	Internal	eMMC 64GB or 128GB (Removeable)
LED	External	2 x swappable 2.5" SATA drive bays (option)
	Indicators	1 x Power LED 1 x Storage LED 2 x Programmable LED (Green, Blue)
EXPANSION	Interface	1 x M.2 2230 A+E key (USB 2.0/PCIe) 1 x M.2 3042/3052 B key (USB 3.0/USB 2.0/PCIe) with Nano SIM 1 x M.2 2242/2280 B+M key (PCIe/SATA) 2 x Mini-PCIe (1 Half; 1 Full) (USB 2.0)
ETHERNET	Controller	2 x Intel Ethernet controller i210 GbE
	Interface	2 x GbE (M12 X-code)
GNSS	GNSS	Support GPS, QZSS, Galileo, GLONASS, BeiDou by u-blox NEO-M9N Dead reckoning support upon request
SENSOR	Sensor	9 axis IMU (3 Accelerometer + 3 Gyroscope + 3 Magnetometer)
FRONT I/O	Display	1 x HDMI
	Ethernet	2 x GbE (M12 X-code) 1 share with OOB
	USB	4 x USB 3.2 type A
	Button	1 x Reset button
	Antenna	3 x Fakra antenna holes
REAR I/O	Display	1 x DP++
	Serial	2 x RS-232/422/485 (DB9-M)
	CAN	2 x CAN 2.0B (DB9-M) (CAN FD by request) Support J1939
	DIO	Isolated 8 bits DIO with 2.5KV isolation Input voltage: 0 to 30VDC Output current: 50mA pre pin and Max. 200mA total On-state voltage: 12VDC nominal, open collector to 30VDC.
	Audio	Stereo speaker with Amplifier to drive 10W speaker (4 pin Terminal) 1 x 3.5mm Line out/Mic In
	Antenna	2 x Fakra antenna holes
SIDE I/O	Antenna	3 x Fakra antenna holes 3 x Fakra antenna holes
WATCHDOG TIMER	Output & Interval	System reset, programmable via software from 1 to 255 seconds
POWER	Type	Wide range 9~36V with ignition control
	Connector	3-pole terminal block
SECURITY	TPM	TPM 2.0 (NUVOTON)
OS SUPPORT	Microsoft	Windows 10/11
	Linux	Linux Ubuntu 22.04
MECHANISM	Construction	Aluminum + SPGC Metal
	Color	Black
	Mounting	Wall mount
	Dimensions (W x H x D)	182.4mm x 61.5mm x 118.4mm 182.4mm x 93.5mm x 118.4mm (2.5" SATA drive bays)
	Weight	TBD
ENVIRONMENT	Temperature	Operating: -40 to 70°C Storage: -40 to 85°C
STANDARDS AND CERTIFICATIONS	Shock	Operating/non-operating: MIL-STD-810G Method 516.6, Procedure 1
	Vibration	Operating/non-operating: MIL-STD-810G Method 514.6, Category 4
	Certification	CE, FCC, E-Mark (E24), ITxPT, RoHS, UKCA (To be updated)

ORDERING INFORMATION

Model Name	Part Number	CPU	LPDDR5	HDMI	DP++	LAN-M12	USB 3.1	CAN	DIO	COM	Speaker	TPM	2.5" SSD
VC700-ASL	750-VC70000-000G	x7835RE	8GB	1	1	2	4	2	1	2	1	TPM 2.0	0
	750-VC70000-100G	x7835RE	4GB										0
	750-VC70000-200G	x7433RE	4GB										0
	750-VC70000-300G	x7211RE	4GB										0
	750-VC70000-400G	x7835RE	8GB										2