VC700-ASL

Intel Atom® Processor Amston Lake Series
In-Vehicle Box PC

KEY FEATURES

Intel ATOM X7000 Wide Temperature Series
Support WIN 11 and Linux

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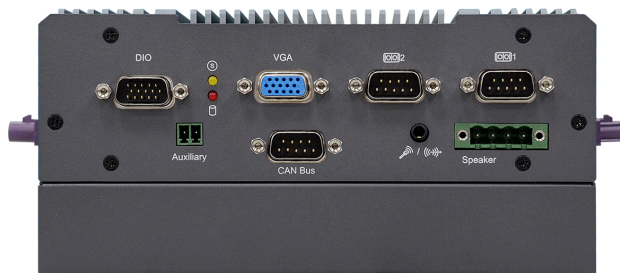9~36V vehicle power input with ACC/IGN function

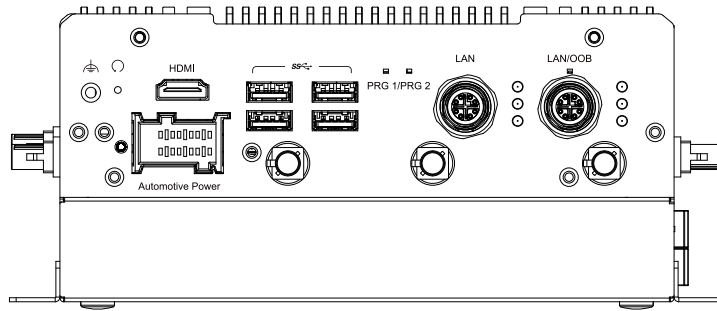### Wide-Temperature
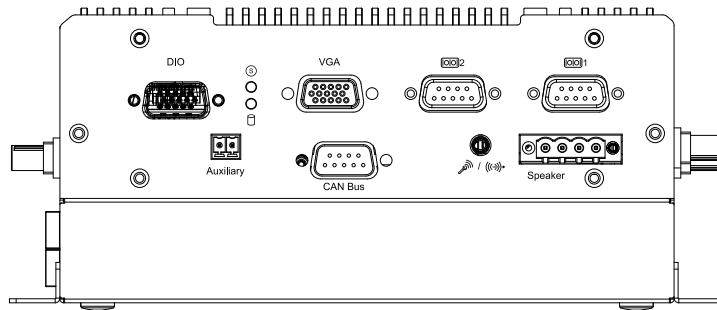-40°C~70°C operation without active fan

FC   CE   E24   RoHS   UKCA   ITXPT

PANEL

Front View

Rear View

DIMENSIONS

Front View

Rear View

SPECIFICATION

SYSTEM	**Processor**	Intel® Atom x7000E 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
GRAPHICS	**Controller**	Intel® HD 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
	Display	1 x HDMI 1.4b (resolution up to 4096x2160 @ 24Hz) 1 x VGA (resolution up to 1920x1200 @ 60Hz)
STORAGE	**Internal**	eMMC 64GB (Removeable)
	External	2 x swappable 2.5" SATA drive bays (option)
LED	**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/PCIe) with 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 RJ45 GbE ports
GNSS	**GNSS**	Support GPS, QZSS, Gallileo, 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 VGA
	Serial	2 x RS-232/422/485 (DB9-M)
	CAN	2 x CAN 2.0B (DB9-M) Support J1939
	DIO	Isolated 8 bits DIO with 2.5KV isolation (DB15-M) **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
FLANK I/O	**Antenna**	2 x Fakra antenna holes 2 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 56.5mm x 118.4mm (W x H x D) 182.4mm x 87.5mm x 118.4mm (W x H x D) (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
	Certifciation	CE, FCC, E-Mark (E24), ITxPT, RoHS, UKCA (To be updated)