

Intel Atom® Processor E3900 Series In-Vehicle Box PC



VC230-AL

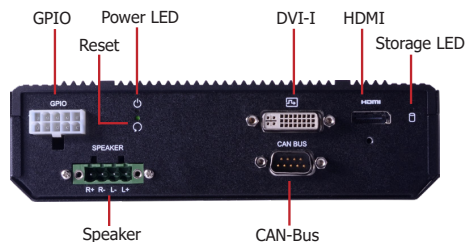


► Features

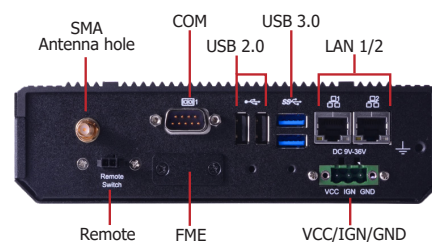
- Anti-vibration and fanless In-Vehicle computer
- Supports ignition delay on/off function
- 1 mSATA, eMMC (optional)
- GPS Onboard
- 3 SIM Slots Onboard
- Supports Wi-Fi, 3G, and GPRS application



► Panel

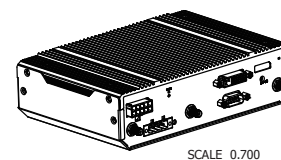
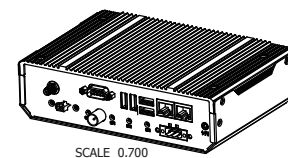
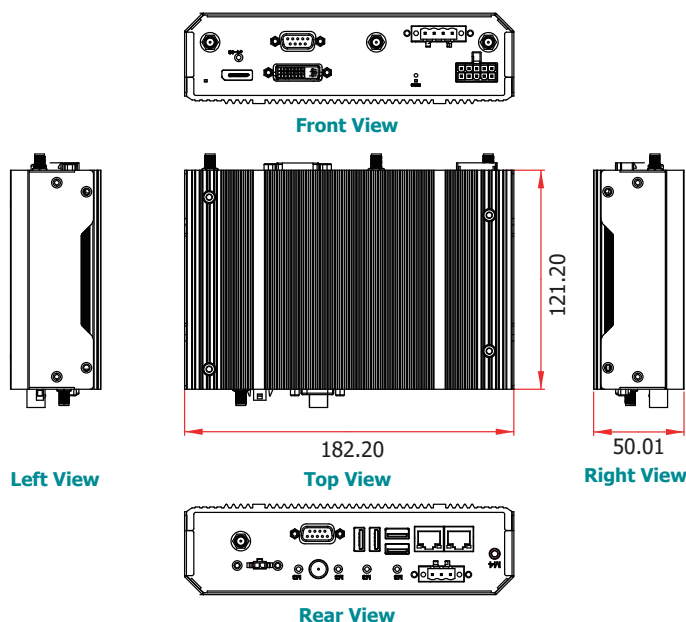


Front View



Rear View

► Dimensions

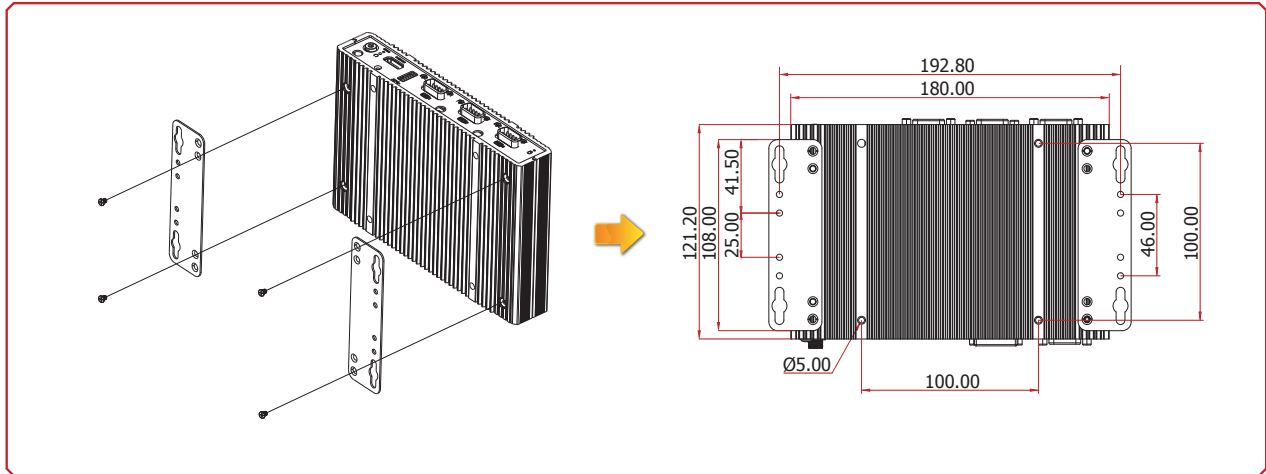


Specifications

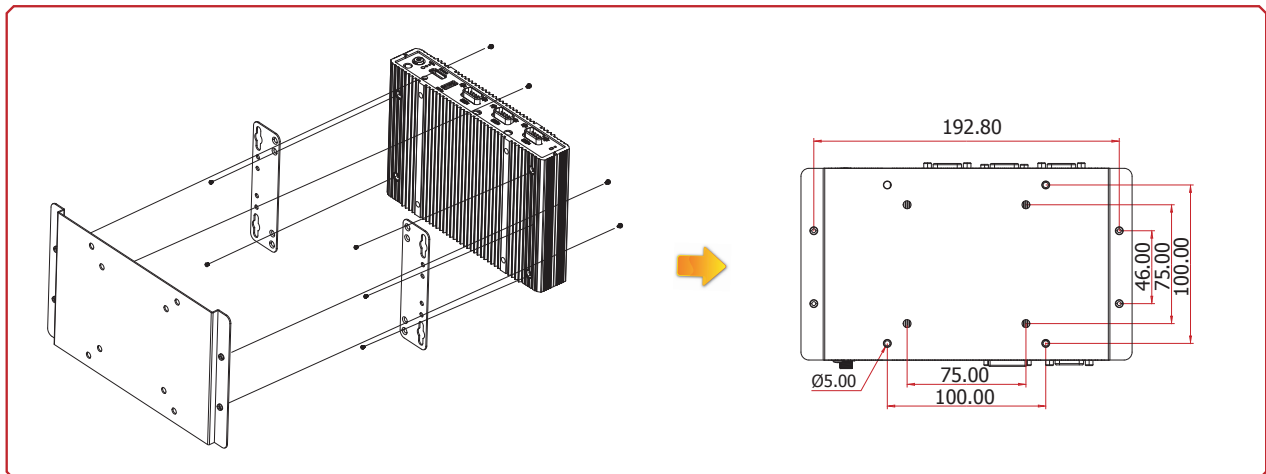
SYSTEM	Processor	Intel Atom® Processor E3900 Series, BGA 1296 Intel Atom® x7-E3950 Processor, Quad Core, 2M Cache, 1.6GHz (2.0GHz), 12W Intel Atom® x5-E3940 Processor, Quad Core, 2M Cache, 1.6GHz (1.8GHz), 9W Intel Atom® x5-E3930 Processor, Dual Core, 2M Cache, 1.3GHz (1.6GHz), 6.5W
	Memory	1 SODIMM Memory Support up to 8GB Single Channel DDR3L 1600/1866MHz
	BIOS	AMI SPI 64Mbit
GRAPHICS	Controller	Intel® HD Graphics
	Display	1 x HDMI 1 x DVI-I HDMI: resolution up to 3840x2160 @ 60Hz DVI-I: resolution up to 2560x1600 @ 60Hz
	Dual Displays	HDMI + DVI-I
STORAGE	External/Internal	4GB/8GB/16GB/32GB eMMC Onboard (available upon request)
EXPANSION	Interface	1 x Full-size Mini PCIe (PCIe/USB/Dual micro SIM) 1 x Full-size Mini PCIe (PCIe/USB/micro SIM) 1 x Half-size Mini PCIe (Share with 1 x mSATA slot)
ETHERNET	Controller	2 x Intel® I210AT PCIe (10/100/1000Mbps)
GPS	GPS	uBlox NEO 8 series NEO-M8U/L as option to support Dead Reckoning
LED	Indicators	1 x Power LED 1 x Storage LED
FRONT I/O	Display	1 x HDMI 1 x DVI-I
	DIO	Isolated 8 bits DIO via 2x5pin 4.2mm Power connector Input Voltage: 0 to 30 VDC, Output Current: 50mA pre pin and Max. 200mA total. On-state Voltage: 12VDC nominal, open collector to 30 VDC.
	CAN-Bus	2 x CAN bus 1 x J1708 ports via DB9-M connector
	Buttons	1 x Reset Button
	Audio Out	1 x 4pins 5.00mm terminal block connector
	Antenna holes	3 x SMA Antenna holes
REAR I/O	Ethernet	2 x GbE (RJ-45)
	Serial	1 x RS-232/422/485 (DB9-M)
	USB	2 x USB 2.0 (type A) 2 x USB 3.0
	Antennas	1 x SMA Antenna Hole 1 x FME Antenna Hole
WATCHDOG TIMER	Output & Interval	System Reset, Programmable via Software from 1 to 255 Seconds
POWER	Type	Wide Range 9~36V with Vehicle Control
	Connector	3-pin Terminal Block (VCC/ACC/GND)
OS SUPPORT		Windows 10 64-bit Linux CentOS 7
MECHANISM	Construction	Aluminum + SPGC Metal
	Mounting	Wall/VESA Mount
	Dimensions (W x H x D)	180mm x 50mm x 121.2mm (W x H x D)
	Weight	TBD
ENVIRONMENT	Operating Temperature	-40 to 70°C
	Storage Temperature	-40 to 85°C
STANDARDS AND CERTIFICATIONS	Shock	MIL-STD-810G Method 516.6
	Vibration	MIL-STD 810G Method 514.6C-3
	Certifications	CE/FCC Class B/E-mark (E13)

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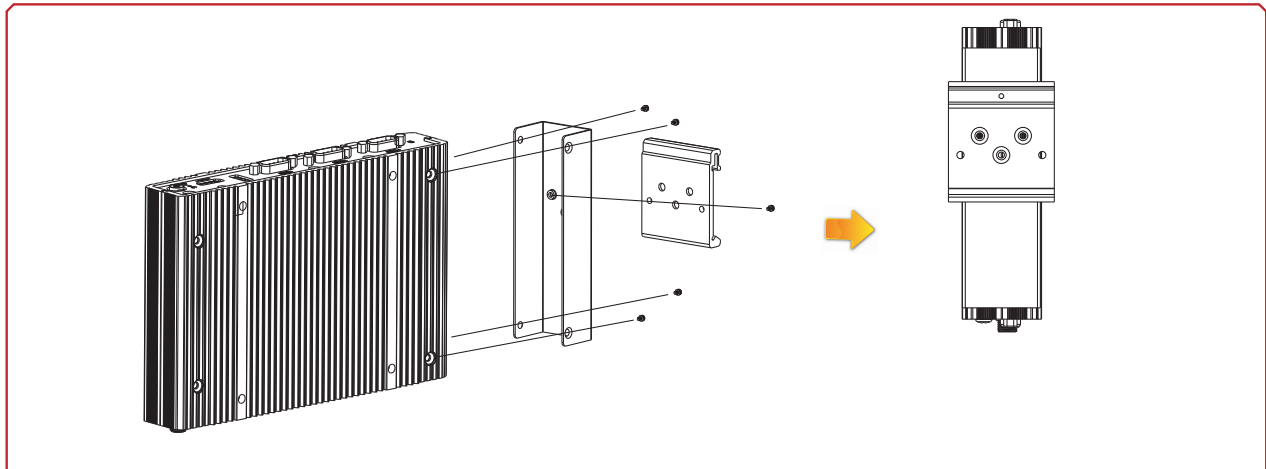
► Wall Mounting



► VESA Mounting



► DIN Rail Mounting



VC230-AL

► Ordering Information

Model Name	Part Number	Description
VC230-AL-E3950	750-VC2301-000G	Fanless, Intel Atom X7-E3950, 2 LAN, 1 HDMI, 1 DVI-I, 1 COM, 4 USB, 1 CANBUS With In Vehicle Power Module 9-36V, F/G RoHS
VC230-AL-E3940	750-VC2301-200G	Fanless, Intel Atom X5-E3940, 2 LAN, 1 HDMI, 1 DVI-I, 1 COM, 4 USB, 1 CANBUS With In Vehicle Power Module 9-36V, F/G RoHS
VC230-AL-E3930	750-VC2301-300G	Fanless, Intel Atom X7-E3930, 2 LAN, 1 HDMI, 1 DVI-I, 1 COM, 4 USB, 1 CANBUS With In Vehicle Power Module 9-36V, F/G RoHS

► Optional Items

Optional Items	Part Number	Description
mSATA	785-MS64GMF	mSATA Card, 64GB MLC, RoHS
	785-MS32GMF	mSATA Card, 32GB MLC, RoHS
	785-MS16GMF	mSATA Card, 16GB MLC, RoHS
	785-MS08GMF	mSATA Card, 8GB MLC, RoHS
Wi-Fi	761-110091-000G	WiFi Kit, Wireless Module, W/Antenna cable*2,200mm, WPEA-121N a/b/g/n (Sparklan), RoHS
Power Cord	785-PWRD	Power cord, Standards (USA/EUR/CH), 1.8m, RoHS
Power Adapter	671-106002-102G	60W, 12V/5A
	671-106009-000G	60W, 19V/3.15A
Wall Mount	761-EC7000-000G	ACCESSORY WALL MOUNT KITS EC700 RoHS
VESA Mount	761-EC7000-100G	VC230-BT VESA Mount Kit, RoHS

785-XXX is a group number instead of a unique part number. Please contact your regional sales representative if you need more information.

► Packing List

• 1 VC230-AL system unit
• 2 mounting screws for Mini PCIe module
• 1 Quick Installation Guide