

IN-VEHICLE Computing

Version. 2024-04-18

VBOX-3122

Taiwan Patent No. M447854

Intel® 11th Gen Core™ 1185G7E CPU 2x LAN/ 2x HDMI/ 1x DVI/ 2x COM/ DC 9-60V Input In-Vehicle Computer

Features

- Intel® 11th Gen Core™ i7-1185G7E
- 3 x M.2 & 2 x mPCle Slots for WWAN / Wi-Fi / SSD /GPS / CAN Expansion
- 9V 60VDC Wide Power Input
- Smart Vehicle Power Management
- 2 x RS-232/422/485 Serial Port
- · 4 x DI / 4 x DO / 2 x Analog Input



Introduction

The VBOX-3122 Series is a robust line of in-vehicle computers designed for high-performance and reliable operation in challenging mobile environments. Powered by the Intel® 11th Gen Core™ i7-1185G7E CPU, these systems are equipped to handle demanding applications with ease. Key features include a wide range power input (9V-60VDC), intelligent vehicle power ignition, and an array of communication interfaces. With expansion slots supporting WWAN, Wi-Fi, GPS, and CAN modules, the series ensures seamless wireless connectivity. Two RS-232/422/485 serial ports, four digital inputs/outputs, and two analog inputs provide versatile interfacing options. Additionally, the system offers multiple video outputs with 2 HDMI and 1 DVI ports. The VBOX-3122 Series, engineered for the diverse needs of modern vehicular systems, is a testament to the convergence of advanced computing technology with rugged, mobile applications.

Specifications

System		
System		
CPU	Intel® 11th Gen Core™ i7-1185G7E up to 2.8 GHz*	
	Intel® 11th Gen Core™ i5-1145G7E up to 2.6 GHz*	
	Intel® 11th Gen Core™ i3-1115G4E up to 3.0 GHz*	
	Intel® Celeron® 6305E 1.8 GHz	
	*CPU TDP is configured at 15W as the default setting.	
Memory	1 x DDR4-3200 SO-DIMM up to 32 GB	
Graphics	Intel® Iris® Xe / UHD Graphics (for Celeron® 6305E only)	
Network	1 x Intel® 2.5GbE supports vPro for Core i5 & i7 SKU 1 x Intel® Gigabit Ethernet	
Watchdog	1 ~ 255 Level Reset	
Security	TPM 2.0	
1/0		
Serial Port	2 x RS-232/422/485	
USB Port	2 x USB 3.2 Gen 2, 2 x USB 2.0	
Ethernet	2 x RJ-45 Ports for 1 x 2.5GbE and 1 x GbE	
Video Port	2 x HDMI 2.0b, 1 x DVI-D *Only supports Single-Link DVI-D cables	
GPIO Port	4 x DI (9~60V) / 4 x DO (5V / 100mA) 2 x Analog Input (0~60V w/0.5V accuracy)	
Audio	1 x MIC-in, 1 x Line-out	
Expansion Bus	1 x M.2. 3042/52 Key B Slot w/ 2 x SIM Card Sockets for WWAN expansion 1 x M.2 2230 Key E slot for Wi-Fi/BT module 1 x mPCle Full-size slot supports USB 3.0 and USB 2.0 w/ SIM card slot 1 x mPCle Full-size Slot supports PCle 3.0 x1 and USB 2.0	
Antenna	6 x Pre-cut Hole for External SMA Antenna	
Software		
Operating System	Windows 10/11 IoT 64-bit, Ubuntu 20.04/22.04 LTS 64-bit	

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	PS (Optional)	*UPS backup time varies depending on actual overall system power consumption. *Operating temperature will be 0~55°C with the battery kit.	
Mechanical	lechanical		
Construction Aluminum Alloy	onstruction	Aluminum Alloy	
Mounting Wall-mount, VESA-mount, Din Rail Mounting Kit	ounting	Wall-mount, VESA-mount, Din Rail Mounting Kit	
Weight 1,800g	eight	1,800g	
Dimensions 210 x 171 x 54 mm (w/ mounting kit)	imensions	210 x 171 x 54 mm (w/ mounting kit)	

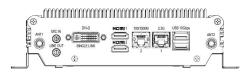
All specifications are subject to change without notice.

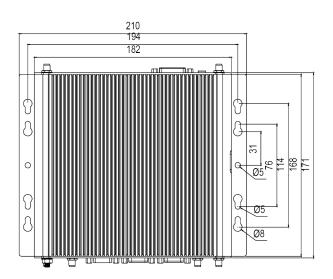


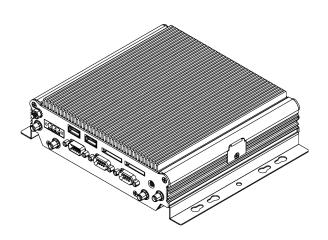
VBOX-3122

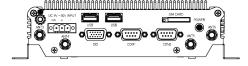
Dimensions

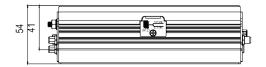
Unit: mm











Ordering Information

Part Number	VBOX-3122-zz zz=i7=Core™ i7-1185G7E, zz=i5=Core™ i5-1145G7E, zz=i3=Core™ i3-1115G4E; zz=C1=Celeron® 6305E
Description	Intel® 11th Gen Core™ i7 / i5 / i3 / Celeron® Processor with 2 x LAN/ 2 x HDMI/ 1 x DVI/ 2 x COM/ DC IN 9-60V In-Vehicle Computer
State of Origin	Made in Taiwan

Optional Accessories

DRAM	DDR4 SO-DIMM 3200 4GB~32GB (-40~85°C)
SATA SSD	2.5 Inch SATA SSD TLC 128GB~1TB (-40~85°C) M.2 2280 Key M NVMe 256 GB~1 TB TLC (-40~85°C)
Wi-Fi / BT Module	M.2 2230 Key A+E Wi-Fi 6 + Bluetooth 5.2 module
WWAN Modem	M.2 3042/52 5G/LTE modem
GPS	mPCle GPS module
CAN Bus	mPCle CAN module
Battery Backup Kit	BAT-3000 kit 1150mAH 3S1P Battery kit (-10~60°C for Discharge)

All specifications are subject to change without notice.



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.

US

sales@assured-systems.com

Sales: +1 347 719 4508 Support: +1 347 719 4508

1309 Coffeen Ave Ste 1200 Sheridan WY 82801 USA

EMEA

sales@assured-systems.com

Sales: +44 (0)1785 879 050 Support: +44 (0)1785 879 050

Unit A5 Douglas Park Stone Business Park Stone ST15 0YJ United Kingdom

VAT Number: 120 9546 28

Business Registration Number: 07699660