IN-VEHICLE Computing Version. 2022-11-30

VBOX-3630





Intel® 11th Gen Core™ i7-1185G7E CPU with 4 x LAN On-Board In-Vehicle Computer

Features

- Intel® 11th Gen Core™ i7-1185G7E
- Supports Dual 5G / LTE, GPS, Wi-Fi / BT and CAN Bus Modules
- Wide Range Input 9V 60VDC with Ignition Control for EV Installations
- 1 x 2.5GbE + 3 x GbE LAN Port with M12X Connectors
- Supports 4 Independent Display Outputs: 2 x HDMI, 1 x DP, 1 x DVI-D
- Supports Optional Battery Backup Kit
- E13 & EN50155 Certified













Introduction

VBOX-3630 is a fanless in-vehicle computer with 5G connectivity. It utilizes Intel® 11th Gen Core™ i7-1185G7E CPU up to 4.4GHz. VBOX-3630 features an ultra-compact design measuring 250 x 165 x 55mm, which can easily fit into restricted spaces. The system can select 5G, LTE, GPS, and Wi-Fi / Bluetooth as robust connectivity by M.2 modules. It is a building-in four independent display output, audio line-out, and microphone-in. It is the perfect solution for fleet management, in-vehicle digital signage, and mobile DVR. Furthermore, it features Smarter Vehicle Power Ignition and wireless remote control in various vehicles.VBOX-3630 can effectively support cars in extreme weather and operating conditions, such as snowplows, trucks, buses, taxis, and forklifts.

Specifications

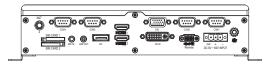
System		
CPU	IntIntel® 11th Gen Core™ i7-1185G7E 1.8GHz up to 4.4GHz Intel® 11th Gen Core™ i5-1145G7E 1.5GHz up to 4.1GHz Intel® 11th Gen Core™ i3-1115G4E 2.2GHz up to 3.9GHz Intel® Celeron® 6305E up to 1.8GHz	
Memory	2x DDR4-3200 SO-DIMM Up to 64GB	
LAN	1x Intel® I255-LM 2.5GbE Supports mGig Supports iAMT and PXE LAN Boot ROM 3x Intel® I210-AT Gigabit Ethernet	
Watchdog	Watchdog Timer Support, Offer 1 – 255 Step	
TPM	2.0	
1/0		
USB	2 x USB 3.2 Gen 2 (10 Gbps) 2 x USB 2.0	
LAN	4 x RJ-45 (1 x 2.5GbE, 3 x GbE) (Optional M12 Connector and/or PoE w/ Max. 60W Power Budget)	
DIO	6 x DI (5~60V) and 4 x DO (5V/100mA) (Optional: 2x 12V/1A Output)	
Audio	1 x Line-out and 1 x Mic-in (option: Line-in)	
Video	2 x HDMI, 1 x DP, 1 x DVI-D* (Supports 4 Independent Display) * Use only with Single Link DVI Cables.	
Expansion Bus	1 x Combo Port (1x M.2 3042/52 Key B or 1 x mPCle Full Card) 1 x M.2 2230 Key A-E, 1 x mPCle Full Size (USB function only)	
Antenna	7 x Pre-cut Holes for External SMA Antenna	
SIM Card Socket	2 x SIM Card Sockets Supported Onboard with Eject	
Serial Port	4 x RS-232/422/485 (Auto Direction Control) (3 Ports for M12 Model)	
Storage		
Туре	$2\times2.5"$ Drive Bay for SATA Type HDD/SSD support RAID 0, 1, 5 $1\times$ M.2 2280 Key M for NVMe SSD	
Software		
Operating System	Windows 10 IoT LTSC (64-bit), Windows 11 IoT (64-bit) Linux Ubuntu 20.04 (64-bit), 22.04 (64-bit)	

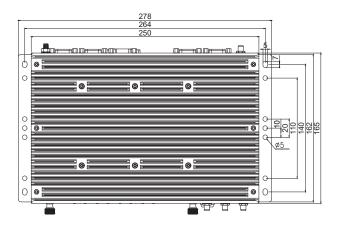
Graphics		
Graphics	Intel® Iris® Xe Graphics / Intel® UHD Graphics	
Resolution	Max Resolution (HDMI2.0b) : 4096 x 2304@60Hz	
	Max Resolution (DP): 4096 x 2304@60Hz	
Environmental		
Operating Temp.	-40 ~ 70°C, ambient w/ 0.6m/s airflow Patent No. M448011-Thermal Cooling	
Storage Temp.	-40 ~ 85°C	
Relative Humidity	10% ~ 90% RH (non-condensing)	
Vibration	IEC60068-2-64, random, 2.5G@5~500Hz, 1hr/axis	
(with SSD)	MIL-STD-810G, Method 514.6, Procedure I, Cat.4, Operating	
Shock	Operating: MIL-STD-810G, Method 514.6, Procedure I, Trucks and semi-trailers 15G (11ms with SSD)	
Certifications	CE, FCC Class A, E13, EN50155, EN45545-2 (R25)	
Power Requirement		
Power Input	9 ~ 60 VDC Input (24 ~ 60 VDC Input for Model VBOX-3630P-M12X)	
Power Protection	Automatics Recovery Short Circuit Protection	
Power Mgmt.	Power Ignition for Vehicles	
Power Off Control	Device Off Delev Time Cotting by Coff and	
	Power Off Delay Time Setting by Software	
UPS	Internal Battery Kit for 10 Mins Operating (Optional, Discharge Temp20-60°C) *UPS backup time varies depending on actual overall system power consumption. Patent No.: M447854 - Build-in Battery	
UPS Mechanical	Internal Battery Kit for 10 Mins Operating (Optional, Discharge Temp20-60°C) "UPS backup time varies depending on actual overall system power consumption.	
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Mechanical	Internal Battery Kit for 10 Mins Operating (Optional, Discharge Temp20-60°C) *UPS backup time varies depending on actual overall system power consumption. Patent No.: M447854 - Build-in Battery	
Mechanical Construction	Internal Battery Kit for 10 Mins Operating (Optional, Discharge Temp20-60°C) *UPS backup time varies depending on actual overall system power consumption. Patent No.: M447854 - Build-in Battery Aluminum Alloy	
Mechanical Construction Mounting	Internal Battery Kit for 10 Mins Operating (Optional, Discharge Temp20-60°C) *UPS backup time varies depending on actual overall system power consumption. Patent No.: M447854 - Build-in Battery Aluminum Alloy Wall-mount	

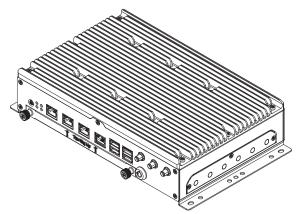
All specifications are subject to change without notice.

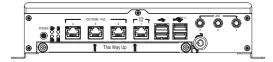
Dimensions Unit : mm

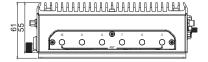
VBOX-3630



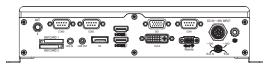


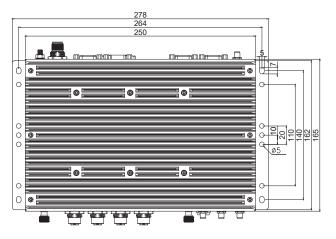


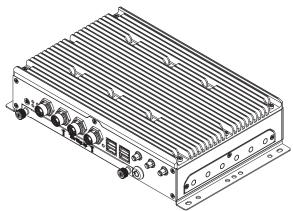


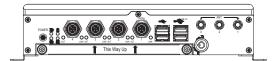


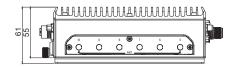
VBOX-3630-M12X











Ordering Information

Part Number	VBOX-3630x-yyyy-zz (x=P=w/PoE, yyyy= M12X=M12 x-code for LAN ports, zz=i7=i7-1185G7E, zz=i5=i5-1145G7E, zz=i3=i3-1115G4E, zz=C1=6305E)
Description	Intel® 11th Gen Core i7-1185G7E CPU with 4 x GbE LAN On-Board Computer
State of Origin	Made in Taiwan

Optional Accessories

DRAM	DDR4 SO-DIMM 3200 8GB~32GB (-40~85°C)
SSD	2.5 inch SATA SSD TLC 64GB~1TB (-40~85°C) M.2 2280 NVMe 256GB~1TB TLC (-40~85°C)
Wi-Fi Module	M.2 2230 Wi-Fi 6 + Bluetooth 5.2 Module
WWAN Modem	M.2 3042/52 5G/LTE Modem
GPS	mPCle GPS Module
CAN Bus	mPCle CAN Bus Module
Battery Backup Kit	BAT-3630 Kit, 2,300mAh 3S1P Battery Kit (-20~60°C for Discharge)

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