IN-VEHICLE Computing Version. 2022-07-2

VBOX-3630R





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

Features

- Intel® 11th Gen Core™ i7-1185G7E
- 5G / LTE (Dual by option), GPS, Wi-Fi / Bluetooth and CAN Bus
- Isolated 24~110VDC Power Input for Rolling Stock
- 1x 2.5GbE + 3x GbE LAN Port with M12 Connectors
- Support 4 Independent Display by 2x HDMI, 1x DP, 1x DVI-D
- Battery Backup Function (optional)
- EN50155 Certified













Introduction

VBOX-3630R is a fanless in-vehicle computer with 5G connectivity. It utilizes the 11th generation Intel® Core™ i7-1185G7E processor up to 4.4GHz. VBOX-3630R's building-in four independent display output, audio line-out/mic-in, and isolated 24~110V DC power input and wireless remote control, and the EN50155 certification will make it the perfect solution for fleet management, digital signage, and rolling stock application.

Specifications

Operating System

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 Intel® AMT and PXE LAN Boot ROM 3x Intel® I210-AT Gigabit Ethernet
Watchdog	Watchdog Timer Support, Offer 1 – 255 Step
TPM	2.0
I/O	
USB	2 x USB 3.2 Gen 2 (Type A) 2 x USB 2.0 (Type A)
LAN	4 x M12 X-coded (1 x mGig supports 2.5GbE, 3 x GbE) and/or IEEE 802.3af/at PoE w/ Max. 60W power budget
DIO	6 x DI (5~60V) and 4 x DO (5V/100mA) (Optional 2x 12V/1A output)
Audio	1x Line-out and 1x Mic-in (optional Line-in)
Video	2x HDMI, 1 x DP, 1 x DVI-D* (Supports 4 Independent Display) * Use only with Single Link DVI Cables.
Expansion Bus	1x Combo Port (1x M.2 3042/52 Key B or 1x mPCle Full Card) 1x M.2 2230 Key A-E, 1x 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	3x RS-232/RS-422/485 (Auto Direction Control) (4th COM port by option)
Storage	
Туре	$2\times2.5^{\circ}$ Drive Bay for SATA Type HDD/SSD support RAID 0, 1, 5 1x M.2 2280 Key M for NVMe SSD* *Additional thermal heatsink is required. Please contact our sales representatives for a suitable type.
Software	
	NAW

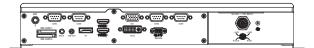
Windows 10 IoT 2021 LTSC 64-bit, Ubuntu 20.04 64-bit

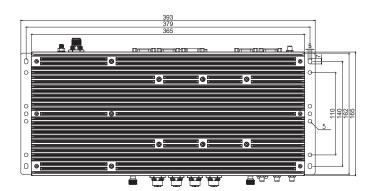
(Intel® 11th Gen Core™ Series Support Windows 11)

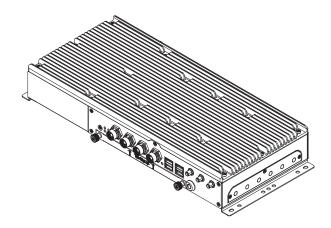
Graphics	
Graphics	Intel® Iris® Xe Graphics / Intel® UHD Graphics
Resolution	Max Resolution (HDMI2.0b) : 4096x2304@60Hz
	Max Resolution (DP): 4096x2304@60Hz
Environment	al
Operating Temp.	-40 ~ 70°C, ambient w/ 0.6m/s airflow Patent No. M448011-Thermal Cooling
Storage Temp.	-40 ~ 85°C
Relative Humidity	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 Requi	rement
Power Input	24 ~ 110VDC Power Input
Power Protection	Automatics Recovery Short Circuit Protection
Power Mgmt.	Vehicle Power Ignition for Variety Vehicle
Power Off Control	Power off Delay Time Setting by Software
Battery (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
Mechanical	
Construction	Aluminum Alloy
Mounting	Wall-mount
Weight	3800g (Barebone)
Dimensions	365(L) x 165(W) x 55(H) mm

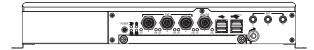
All specifications are subject to change without notice.

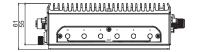
Dimensions Unit: mm











Ordering Information

Part Number	VBOX-3630xR-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)
SATA SSD	2.5 inch TLC 64GB~1TB -40~85°C, M.2 2280 Key M for NVMe 256 GB~1 TB TLC -40~85°C with Heatsink
Modem	M.2 3042/52 Key B for 5G/LTE Modem *5G Modem with Heatsink
GPS	mPCle GPS Module
CAN Bus	mPCle CAN Bus Module
Battery Backup	BAT-3630 Kit, 2300mAh 3S1P Battery Kit (-20~60°C for Discharge)

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