Backplane Systems Technology Pty Ltd

TEL 02 9457 6400
sales@backplane.com.au
www.backplane.com.au

VBOX-3630

PATENT No. **M447854** BUILT-IN BATTERY

PATENT No. **M448001** THERMAL COOLING

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

intel. 11th Gen CORE | **9-60V** POWER INPUT | **4** Display | **5G** | **E13** EN50155

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

I/O

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 mPCIe Full Card)
	1 x M.2 2230 Key A-E, 1 x mPCIe 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

Type	2 x 2.5" Drive Bay for SATA Type HDD/SSD support RAID 0, 1, 5 1 x M.2 2280 Key M for NVMe SSD

Software

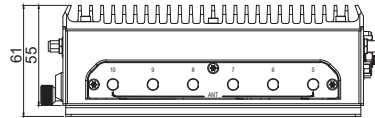|	
Operating System	Windows 10 IoT LTSC (64-bit), Windows 11 IoT (64-bit) Linux Ubuntu 20.04 (64-bit), 22.04 (64-bit)

Graphics

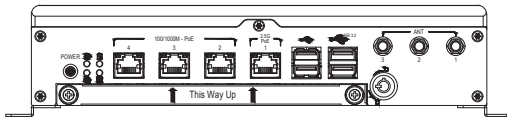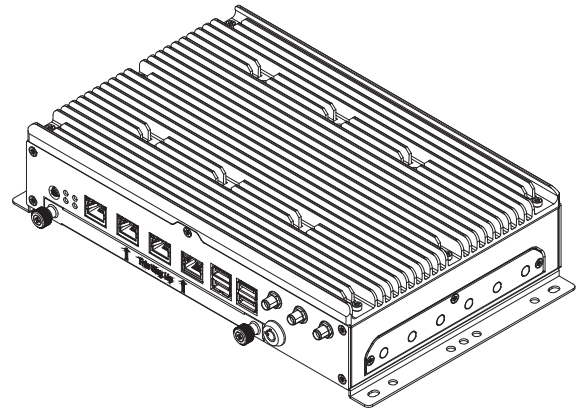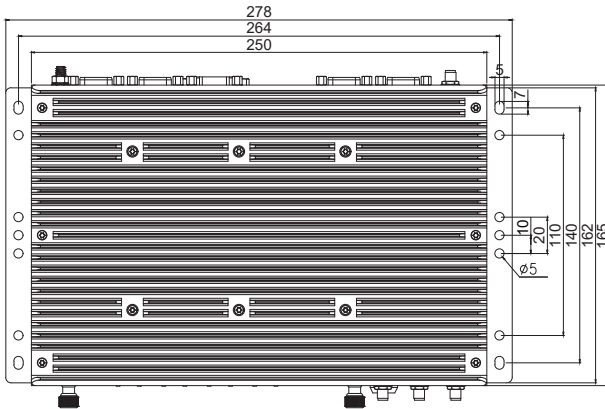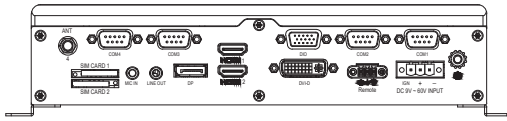|	
Graphics	Intel® Iris® Xe Graphics / Intel® UHD Graphics
Resolution	Max Resolution (HDMI2.0b) : 4096 x 2304@60Hz
	Max Resolution (DP) : 4096 x 2304@60Hz

Environmental

Operating Temp.	-40 ~ 70ºC, ambient w/ 0.6m/s airflow Patent No. M448011-Thermal Cooling
Storage Temp.	-40 ~ 85ºC
Relative Humidity	10% ~ 90% RH (non-condensing)
Vibration (with SSD)	IEC60068-2-64, random, 2.5G@5~500Hz, 1hr/axis
	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	Power Off Delay Time Setting by Software
UPS	Internal Battery Kit for 10 Mins Operating (Optional, Discharge Temp. -20~60°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	2,500g (Barebone)
Dimensions	250(L) x 165(W) x 55(H) mm

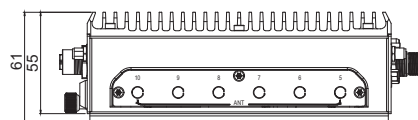All specifications are subject to change without notice.

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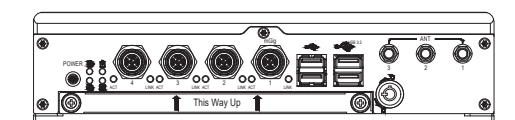TEL 02 9457 6400
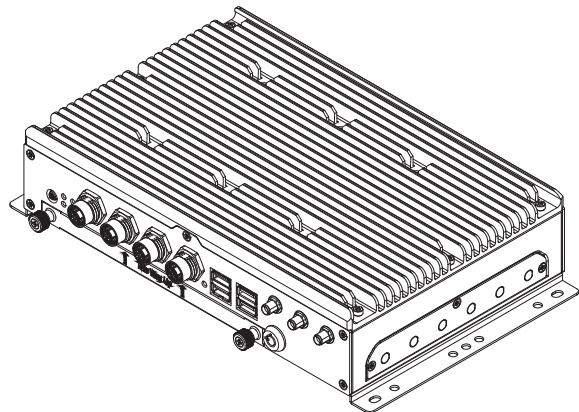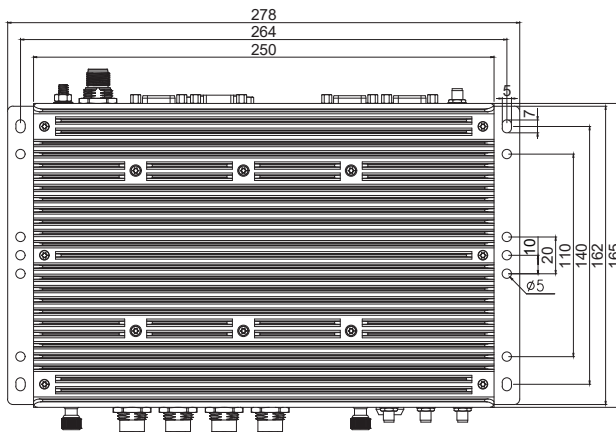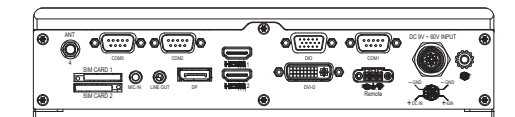sales@backplane.com.au
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Dimensions

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	mPCIe GPS Module
75B´6l g	mPCIe CAN Bus Module
6Uhifm6UW d?]h	BAT-3630 Kit, 2,300mAh 3S1P Battery Kit (-20~60°C for Discharge)

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