

IN-VEHICLE Computing

# VBOX-3620-M12X

Taiwan Patent No. M447854, M448011

Intel Gen6 Core i7-6600U CPU with Isolated Input 3 x GbE and 1 x iAMT  
In-Vehicle Computer/ EN50155 Railway Applications

## Features

- Intel Core i7-6600U / i5-6300U / i3-6100U
- Wireless support LTE w/ SIM Card, WLAN, GPS Dead Reckoning, BT(Optional)
- 3 x GbE including 1 with iAMT
- Isolated wide Input Range 9-36V DC
- Max. 8 x SIM card Sockets
- Dual Hot Swappable SATA Storage, RAID 0,1,5
- EN50155 Tx temperature and class S2 interruption
- E-13 Certified



## Introduction

The VBOX-3620-M12X is powered by Intel Gen6 Core i7-6600U CPU with Isolated input In-Vehicle Computer. VBOX-3620-M12X provides three GbE, including one with iAMT. It offers wireless support LTE with SIM Card, GPS, and BT (optional). It features smart vehicle power ignition for a variety of vehicles, and it can be adapted to all kinds of vehicle management systems like those with GPS, fleet monitoring systems, and vehicle repairing systems. It can manage a vehicle's internal capabilities to accurately assess and track a vehicle's internal hardware and software states, forward-thinking usage, and all fleet movements.

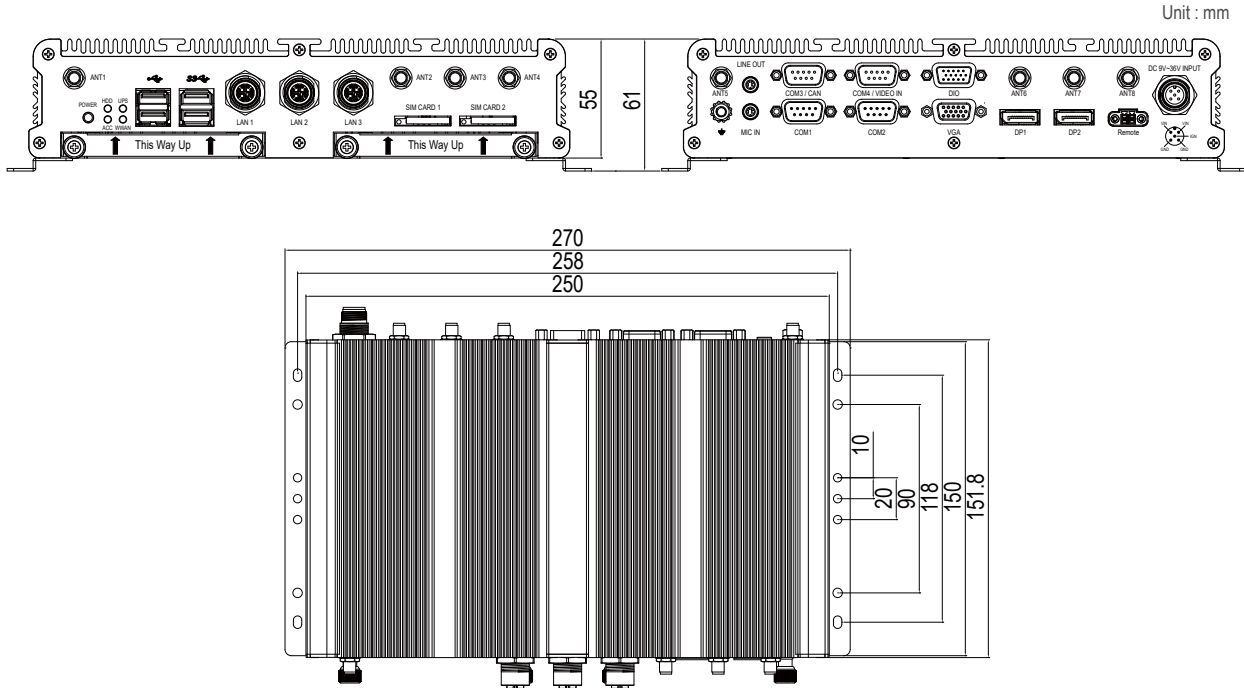
## Specifications

System	
CPU	Intel Gen6 Core i7-6600U 2.6GHz up to 3.4GHz Intel Gen6 Core i5-6300U 2.4GHz up to 3GHz Intel Gen6 Core i3-6100U 2.3GHz Intel Gen6 Dual Core 3955U 2.0GHz
Memory	2 x SO-DIMM DDR4 up to 32GB
LAN Chipset	6 x Intel I210AT
Audio	Realtek ALC662 HD Codec Onboard
Watchdog	Watchdog Timer Support, Offer 1 – 255 Step
I/O	
Serial Port	4 x RS-232/422/485, w/ isolation (Auto Direction Control)
USB Port	2 x USB 3.0 Ports, 2 x USB 2.0 Ports
LAN	3 x 10/100/1000 Mb/s w/ M12 x-code (1 port with iAMT)
Video Port	2 x DP Port, 1 x VGA (Support Triple Independent Display)
DIO Port	8 x GPI and 4 x GPO w/ isolation
Audio	1 x Line-out and 1 x Mic-in (Line-in Optional)
SIM Card Socket	2 x SIM Card Sockets, supported onboard with eject 6 x SIM Card Sockets (Optional order No. SIM-6A)
Expansion Bus	3 x Mini-card slots and 1 x M.2 A-E Key 2230 slot
Graphics	
Graphics	Intel® HD Graphics 520 DirectX Video Acceleration (DXVA) for Accelerating Video Processing - Full AVC/VC1/MPEG2 HW Decode Supports DirectX 11/10.1/10/9 and OpenGL 4.0
Resolution	Up to 4096 x 2304@60 Hz
Software	
Operating System	Win 10, Ubuntu 16.04 64bit

Environmental	
Operating Temp.	-40°C ~ 70°C, ambient w/ 0.6m/s airflow <b>Patent No. : M565941 - Thermal Cooling</b>
Storage Temp.	-40°C ~ 80°C
Relative Humidity	10% RH – 90% RH (non-condensing)
Vibration (with SSD)	IEC60068-2-64, random, 2.5G@5~500Hz, 1hr/axis EN 50155 EN61373, Operating
Shock	EN 50155 EN61373
Certifications	CE, FCC Class A, EN50155, EN50121, E13, EN45545-2 (R25)
Storage	
Type	2 x 2.5" Drive Bay for SATA Type HDD/SSD RAID 0, 1, 5 1 x SATA DOM
Power Requirement	
Power Input	9V - 36V DC Power Input with Isolation
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 and BIOS
Battery (UPS)*	Internal Battery Kit for 10 Mins Operating (Optional) *UPS backup time varies depending on actual overall system power consumption. <b>Patent No. : M447854 - Build-in Battery</b> *with 6 x SIM card slots option cannot have Battery option
Mechanical	
Construction	Aluminum Alloy
Mounting	Supports Both of Wall-mount/VESA-mount
Weight	1900g
Dimensions	250 x 150 x 55 mm

All specifications are subject to change without notice.

## Dimensions



Please Scan The QR Code For More Information

## Ordering Information

Part Number	VBOX-3620-M12X-i7, option for i5/i3/C1
Description	Intel Gen6 Core i7-6600U CPU with Isolated Input 3x GbE with 1 x iAMT In-Vehicle Computer/EN50155 Railway Applications
State of Origin	Made in Taiwan

## Optional Accessories

DRAM	SO-DIMM max.DDR4-2133,4GB-32GB,0~70°C/-40~85°C
SATA SSD	2.5inch MLC/TLC 64GB~1TB 0~70°C/-40~85°C
SATA DOM	MLC 8G~128GB, 0~70°C/-40~85°C
Wi-Fi	Wifi miniPCIe half size card 802.3a/b/g/n/ac
Modem	LTE miniPCIe card
GPS	GPS miniPCIe card
CANBUS	CANBUS miniPCIe card
SIM-6A Kit	3 x Modem miniPCIe w/ 6*SIM cards. Cannot use with BAT-3620
Battery Backup Kit	BAT-3620 kit, 1150mAH 3S1P Battery kit (-30~60°C)
Power Adapter	90W AC/DC Adapter Recommended

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](mailto: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](mailto: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