

# VBOX-3610-M12

Intel Gen5 Core i7-5650U CPU with HD 6000 GPU / 2 x M12 LAN  
On-Board Computer



Taiwan Patent No. M447854

Taiwan Patent No. M448011

## System

<b>CPU</b>	Intel Gen 5 Core i7-5650U 2.2GHz up to 3.1GHz Intel Gen 5 Core i3-5010U 2.1GHz Intel Gen 4 Core i7-4650U 1.7GHz up to 3.3GHz Intel Gen 4 Core i5-4300U 1.9GHz up to 2.9GHz Intel Gen 4 Core i3-4010U 1.7GHz Intel Gen 4 Dual Core Celeron 2980U 1.6GHz
<b>Memory</b>	2 x DDR3L 1600 MHz SO-DIMM up to 16GB
<b>Chipset</b>	N/A
<b>LAN Chipset</b>	Intel I210-AT Gb/s Ethernet Controllers Onboard Support PXE and WOL
<b>Audio</b>	Realtek ALC662 HD Codec Onboard
<b>Watchdog</b>	Watchdog Timer Support, Offer 1 – 255 Step

## I/O

<b>Serial Port</b>	4 x RS-232 (2 with RS-422/485 (Auto Direction Control))
<b>USB Port</b>	2 x USB 3.0 Ports, 2 x USB 2.0 Ports
<b>LAN</b>	2 x M12 Ports for GbE
<b>Video Port</b>	1 x DVI-I, 1 x VGA and 1 x DP (support Triple Independent Display)
<b>DIO Port</b>	4 In and 4 Out
<b>Audio</b>	1 x Line-out and 1 x Mic-in (Line-in Optional)
<b>SIM Card Socket</b>	2 x SIM Card Sockets Supported Onboard with eject

## Graphics

<b>Graphics</b>	Intel® HD Graphics 6000 / 5000 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
<b>Resolution</b>	Up to 3200x2000@60Hz (DP) for Gen 4 Up to 3840x2160@60Hz (DP) for Gen 5

## Storage

<b>Type</b>	2 x 2.5" Drive Bay for SATA Type HDD/SSD, Support RAID 0, 1 1 x SATA DOM
-------------	---

## Features

- Intel Core i7-5650U / Core i3-5010U
- Wireless support LTE, 3.5G w/ Dual SIM Cards, WLAN, GPS Dead Reckoning, GSM/GPRS, BT
- 9V - 36V DC Power Input
- Vehicle Power Ignition for Variety Vehicle
- Dual Hot Swappable SATA Storage
- 1 x CAN Bus 2.0B (Optional)
- 2 x M12 LAN Ports

## Power Requirement

<b>Power Input</b>	9V - 36V DC Power Input
<b>Power Protection</b>	Automatic Recovery Short Circuit Protection
<b>Power Management</b>	Vehicle Power Ignition for Variety Vehicle
<b>Power Off Control</b>	Power off Delay Time Setting by BIOS and Software
<b>Battery (UPS)</b>	Internal Battery Kit for 10 Mins Operating (Optional) <b>Patent No. : M447854 - Build-in Battery</b>

## Environmental

<b>Operating Temp.</b>	-40°C ~ 70°C (Default CPU 17Watt)
<b>Storage Temp.</b>	-40°C ~ 80°C
<b>Relative Humidity</b>	0% RH – 95% RH
<b>Vibration(random)</b>	2.5g@5~500 Hz with SSD
<b>Vibration Operating</b>	MIL-STD-810F, Method 514.5, Category 20, Ground Vehicle-Highway
<b>Truck Storage</b>	MIL-STD-810F, Method 514.5, Category 24, Integrity Test
<b>Shock</b>	Operating: MIL-STD-810F, Method 516.5, Procedure I, Trucks and semi-trailers=15G (11ms) with SSD
<b>Crash Hazard</b>	MIL-STD-810F, Method 516.5, Procedure V, Ground equipment=100g
<b>Certifications</b>	CE, FCC Class A, EMark Compliance, EN50155, EN50121, EN45545-2 (R25)

## Mechanical

<b>Construction</b>	Aluminum Alloy
<b>Mounting</b>	Supports Both of Wall-mount/VESA-mount
<b>Weight</b>	1780 g (Barebone)
<b>Dimensions</b>	250 x 150 x 55 mm

## Ordering Information

<b>Part Number</b>	VBOX-3610-M12-000
<b>Description</b>	Intel Gen5 Core i7-5650U CPU with HD 6000 GPU / 2 x M12 LAN On-Board Computer