# **VBOX-3610-M12**

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





Power Ignition

Wide Range









- Vehicle Power Ignition for Variety Vehicle
- Dual Hot Swappable SATA Storage
- 1 x CAN Bus 2.0B (Optional)
- 2 x M12 LAN Ports









Taiwan Patent No. M447854 Taiwan Patent No. M448011

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CPU	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
Memory	2 x DDR3L 1600 MHz SO-DIMM up to 16GB
Chipset	N/A
LAN Chipset	Intel I210-AT Gb/s Ethernet Controllers Onboard
	Support PXE and WOL
Audio	Realtek ALC662 HD Codec Onboard
Watchdog	Watchdog Timer Support, Offer 1 – 255 Step

#### 1/0 **Serial Port** 4 x RS-232 (2 with RS-422/485 (Auto Direction Control)) **USB Port** 2 x USB 3.0 Ports, 2 x USB 2.0 Ports LAN 2 x M12 Ports for GbE Video Port 1 x DVI-I. 1 x VGA and 1 x DP (support Triple Independent Display) **DIO Port** 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

Graphic	s
Graphics	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
Resolution	Up to 3200x2000@60Hz (DP) for Gen 4

	Up to 3840x2160@60Hz (DP) for Gen 5
Storage	
Туре	$2\times2.5"$ Drive Bay for SATA Type HDD/SSD, Support RAID 0, 1

1 x SATA DOM

## **Power Requirement**

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

#### **Environmental**

Storage Temp40°C ~ 80°C  Relative Humidity 0% RH – 95% RH  Vibration(random) 2.5g@5~500 Hz with SSD  Vibration Operating MIL-STD-810F, Method 514.5, Category 20, Ground Vehicle-Highway  Truck Storage MIL-STD-810F, Method 514.5, Category 24, Integrity Test  Shock Operating: MIL-STD-810F, Method 516.5, Procedure I, Trucks and semi-trailers=15G (11ms) with SSD  Crash Hazard MIL-STD-810F, Method 516.5, Procedure V, Ground equipment=100g  Certifications CE, FCC Class A, EMark Compliance, EN50155, EN50121	Operating Temp.	-40°C ~ 70°C (Default CPU 17Watt)
Vibration(random) 2.5g@5~500 Hz with SSD  Vibration Operating MIL-STD-810F, Method 514.5, Category 20, Ground Vehicle-Highway  Truck Storage MIL-STD-810F, Method 514.5, Category 24, Integrity Test  Shock Operating: MIL-STD-810F, Method 516.5, Procedure I, Trucks and semi-trailers=15G (11ms) with SSD  Crash Hazard MIL-STD-810F, Method 516.5, Procedure V, Ground equipment=100g	Storage Temp.	-40°C ~ 80°C
Vibration Operating MIL-STD-810F, Method 514.5, Category 20, Ground Vehicle-Highway  Truck Storage MIL-STD-810F, Method 514.5, Category 24, Integrity Test  Shock Operating: MIL-STD-810F, Method 516.5, Procedure I, Trucks and semi-trailers=15G (11ms) with SSD  Crash Hazard MIL-STD-810F, Method 516.5, Procedure V, Ground equipment=100g	Relative Humidity	0% RH – 95% RH
Ground Vehicle-Highway  Truck Storage MIL-STD-810F, Method 514.5, Category 24, Integrity Test  Shock Operating: MIL-STD-810F, Method 516.5, Procedure I, Trucks and semi-trailers=15G (11ms) with SSD  Crash Hazard MIL-STD-810F, Method 516.5, Procedure V, Ground equipment=100g	Vibration(random)	2.5g@5~500 Hz with SSD
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Shock Operating: MIL-STD-810F, Method 516.5, Procedure I, Trucks and semi-trailers=15G (11ms) with SSD  Crash Hazard MIL-STD-810F, Method 516.5, Procedure V, Ground equipment=100g		Ground Vehicle-Highway
Trucks and semi-trailers=15G (11ms) with SSD  Crash Hazard MIL-STD-810F, Method 516.5, Procedure V,  Ground equipment=100g	Truck Storage	MIL-STD-810F, Method 514.5, Category 24, Integrity Test
Crash Hazard MIL-STD-810F, Method 516.5, Procedure V, Ground equipment=100g	Shock	Operating: MIL-STD-810F, Method 516.5, Procedure I,
Ground equipment=100g		Trucks and semi-trailers=15G (11ms) with SSD
	Crash Hazard	MIL-STD-810F, Method 516.5, Procedure V,
Certifications CE, FCC Class A, EMark Compliance, EN50155, EN50121		Ground equipment=100g
	Certifications	CE, FCC Class A, EMark Compliance, EN50155, EN50121

#### Mechanical

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

### **Ordering Information**

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