# VBOX-3610-M12

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

Delay Time

Power Ignition

Wide Range

Wireless

Battery Backup

**Taiwan Patent No. M447854**
**Taiwan Patent No. M448011**

## 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

## System

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|---|---|
| **CPU** | Intel Gen 5 Core i7-5650U 2.2GHz up to 3.1GHz<br>Intel Gen 5 Core i3-5010U 2.1GHz<br>Intel Gen 4 Core i7-4650U 1.7GHz up to 3.3GHz<br>Intel Gen 4 Core i5-4300U 1.9GHz up to 2.9GHz<br>Intel Gen 4 Core i3-4010U 1.7GHz<br>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<br>Support PXE and WOL |
| **Audio** | Realtek ALC662 HD Codec Onboard |
| **Watchdog** | Watchdog Timer Support, Offer 1 – 255 Step |

## I/O

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|---|---|
| **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<br>(support Triple Independent Display) |
| **DIO Port** | 4 In and 4 Out |
| **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 |

## Graphics

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|---|---|
| **Graphics** | Intel® HD Graphics 6000 / 5000<br>DirectX Video Acceleration (DXVA) for Accelerating Video Processing - Full AVC/VC1/MPEG2 HW Decode<br>Supports DirectX 11/10.1/10/9 and OpenGL 4.0 |
| **Resolution** | Up to 3200x2000@60Hz (DP) for Gen 4<br>Up to 3840x2160@60Hz (DP) for Gen 5 |

## Storage

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

## Power Requirement

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

## Environmental

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|---|---|
| **Operating Temp.** | -40ºC ~ 70ºC (Default CPU 17Watt) |
| **Storage Temp.** | -40ºC ~ 80ºC |
| **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,<br>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,<br>Trucks and semi-trailers=15G (11ms) with SSD |
| **Crash Hazard** | MIL-STD-810F, Method 516.5, Procedure V,<br>Ground equipment=100g |
| **Certifications** | CE, FCC Class A, EMark Compliance, EN50155, EN50121, EN45545-2 (R25) |

## Mechanical

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

## Ordering Information

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

All specifications are subject to change without notice.