

# QBOX-3100

Fanless Box Pc for In-Vehicle Computer  
with Isolated 9~36V DC Input



- Intel® D525 Dual Core 1.8 GHz processor
- Wireless communication support 3.5G, WLAN, GPS, GSM/GPRS, Bluetooth
- 9V - 36V DC Power Input with 1500VDC Isolation
- Automatics Recovery Short Circuit Protection
- Smarter Vehicle Power Ignition for variety vehicle
- Support 2 x RS-232 with 5V/12V output
- Support 2 x DI / 2 x DO with Relay 12V / 100mA

## Product Overview

The QBOX-3100 is a fanless In-Vehicle Box PC which is ideal for transportation applications. This embedded hardware platform is designed with Intel® D525 Dual Core 1.8GHz Processor which provides with excellent performance. The system is supported with Intel® ICH8-M chipset, and DDR3 667 MHz So-DIMM up to 2GB. Featured are an 2.5" SATA HDD or SSD, 2 x GbE, 4 x USB 2.0, 2 x DB-15, 4 x COMs,

Audio ports, DIO, Mini-PCIe and PCI-104 expansion slots for wireless applications. The QBOX-3100 provides high reliability rugged case not only for great protection from EMI, cold and heat, but also integrated with active cooling design for harsh environment operation which is best for transportation applications.

## Technical Information

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| <b>Construction</b>  |   |
| Aluminum Alloy   |   |
| <b>CPU</b>   |   |
| Intel® D525 Dual Core 1.8 GHz Processor  |   |
| <b>Chipset</b>   |   |
| ICH8-M   |   |
| <b>Memory</b>  |   |
| 1 x DDR 3 667 MHz SO-DIMM up to 2GB  |   |
| <b>Graphics</b>  |   |
| NVIDIA GeForce GT218-ILV onboard<br>ATOM D525 integrated graphics( Optional)   |   |
| <b>LAN</b>   |   |
| 2 x Realtek RTL811C Gb/s Ethernet Controllers on board support WOL, PXE  |   |
| <b>Watchdog</b>  |   |
| 1 ~ 255 Level Reset  |   |
| <b>Storage</b>   |   |
| 1 x 2.5" drive bay for SATA Type Hard Disk Drive/SSD   |   |
| <b>Graphics</b>  |   |
| NVIDIA GeForce: 512MB DDR3 memory onboard for GT218-ILV<br>GT218-ILV: One 2 x 20 -pins LVDS connector onboard for 24 bits Dual , Channel LVDS supported , resolution up to 1920 x 1200.<br>Two DB-15 VGA connectors on rear I/O, support Dual independent display, resolution up to 2045 x 1560 @ 85 Hz. One HDMI connector on front I/O<br>D525 integrated: one 2 x 8 pins pitch 2.0 mm lockable box header for VGA |   |
| <b>I/O</b>   |   |
| COM  | 4 x RS-232  |
| USB  | 4 x USB 2.0 Ports   |
| LAN  | 2 x RJ-45 for GbE   |
| Video  | 2 x DB-15 for VGA Output  |
| DIO  | Mic-in/Line-out (Realtek ALC 662 HD Codec)  |
| Audio  | 2 x Mini-card slot  |
| Expansion  | 2 x Mini-PCIe sockets supported,<br>1 x Mini-PCIe socket for WWAN module with SIM card,<br>1 x PCI-104 slot supported |

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| <b>Power Requirement</b>   |  |
| Power Input: 9V-36V DC Power Input<br>Power Protection: Automatics Recovery Short Circuit Protection<br>Power Management: Vehicle Power Ignition for Variety Vehicles<br>Backup Battery: Internal Battery Kit for 10 Min. Operating (Optional)   |  |
| <b>Environment</b>   |  |
| Operating Temp: -20°C to 60°C (SSD), ambient w/air<br>Relative Humidity: 10~90% (non-condensing)<br>Vibration (Random): 2.5g@5~500 Hz with SSD<br>Vibration Operating: MIL-STD-810F, Method 514.5, Category 20, Ground-Vehicle-Highway<br>Truck Storage: MIL-STD-810F, Method 514.5, Cat. 24, Integrity Test<br>Shock: Operating: MIL-STD-810F, Method 516.5, Procedure I, Trucks and semi-trailers = 40G (11ms), Non-Operating 80G with SSD<br>Crash harazd: MIL-STD-810F, Method 516.5, Procedure V, Ground equipment = 100g |  |
| <b>Dimensions</b>  |  |
| 235 x 155 x 50 mm (LxWxH)  |  |
| <b>Weight</b>  |  |
| 1.5 kg (barebone)  |  |
| <b>Mounting</b>  |  |
| Wall mount, VESA mount   |  |