



VBC-6060

Fanless In-Vehicle Box PC with Intel® Core™ i7-4700EQ CPU

Arestech's VBC-6060 is a fanless Box PC specifically designed for use in vehicles. Featuring a high performance Intel® Core™ i7-4700EQ CPU, the VBC-6060 has the ability to easily adapt to vehicle-specific applications. An Intel® HD Graphics 4600 engine provides high resolution and smooth performance via three different video outputs (VGA, DP, HDMI). Four PoE ports can be directly connected to video surveillance devices, simplifying the installation procedure. Controller Area Network (CAN) bus 2.0B support can also be used to communicate with and control additional devices within a vehicle; three internal HDDs provide for the largest possible storage capacity. The VBC-6060 has three Mini PCIe slots (for 3G / WLAN / LTE modules), and a build-in GPS and BDS system for real-time information access in remote or mobile environments. The VBC-6060 also features a rugged design, supports 9-36 V power input, and can operate within a wide temperature range (-25~70° C) and high vibration environments.

Features

- In-Vehicle Fanless Box PC, Intel® Core™ i7-4700EQ CPU
- CAN Bus 2.0B, 4 PoE Ports, Isolated Digital I/O
- Dual-Mode GNSS, GPS+BDS Systems
- 3 Mini PCIe (3G / WLAN / LTE Modules), 2 SIM Ejectors
- 9-36 V DC Power Input with Ignition Pin and Swappable FUSE
- -25~70° C Operating Temperature

Applications

- In-vehicle Control Systems
- Remote Video Surveillance
- Multimedia Display and Digital Signage in Vehicles
- Wireless Network Communication

VBC-6060

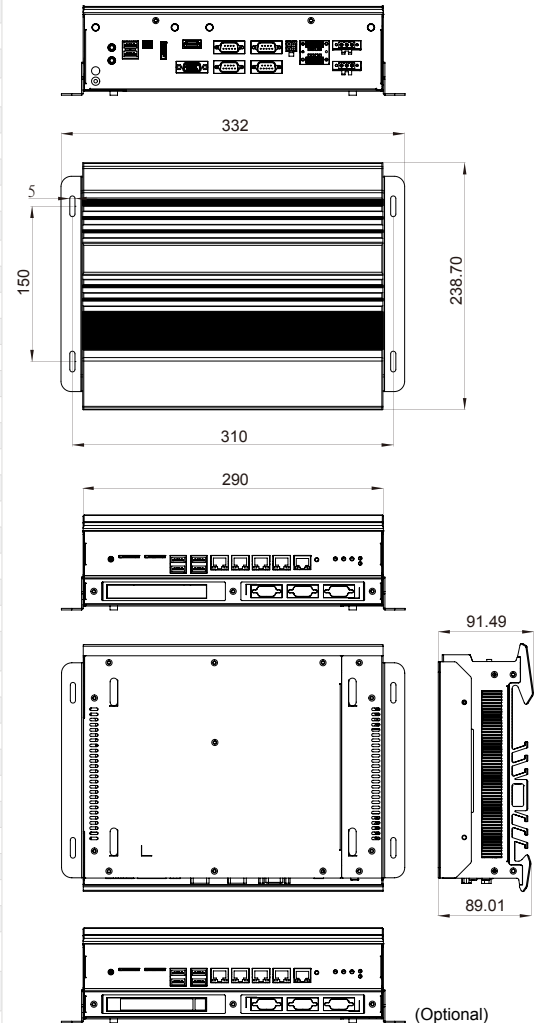
Fanless In-Vehicle Box PC with Intel® Core™ i7-4700 EQ CPU



Specifications

Model		VBC-6060-1A1	VBC-6060-2A1	VBC-6060-3A1
Processor System	CPU	Intel® Core™ i7-4700EQ	Intel® Core™ i5-4400E	Intel® Core™ i3-4100E
	Frequency	Quad-Core 2.40 GHz	Dual-Core 1.80 GHz	Dual-Core 1.80 GHz
	Cache	Intel® Smart Cache 6 MB	Intel® Smart Cache 3 MB	Intel® Smart Cache 3 MB
	System Chipset	Intel® QM87		
	BIOS	UEFI		
Memory	Technology	DDR3L 1333/1600 MHz SDRAM		
	Max. Capacity	16 GB		
	Socket	2 (204-pin SO-DIMM)		
Display	Graphics Engine	Intel® HD Graphics 4600		
	VGA	Up to 1920 x 1200 at 60Hz		
	HDMI	1.3a, up to 2560 x 1600 at 60 Hz		
	DP	Up to 3840 x 2160 at 60 Hz		
	Three Display	1 VGA + 1 HDMI + 1 DP (under Windows OS only)		
I/O Interface	USB	4 USB 3.0, 2 USB 2.0		
	Serial Port	2 RS-232/422/485 (one supports 5/12V, 0.5A), 2 RS-232		
	Digital I/O	8-bit isolated digital I/O (4 input and 4 output, 5 V @ 0.5 A)		
	DC output	12V DC output (2x2 pin), 1A		
	CAN Bus	Built-in CAN bus 2.0B. Optional OBDII function (SAE J1939 / J1708)		
Ethernet	Controller	1 GbE, 10/100/1000 Mbps (Intel i217LM) ; 2 PoE (IEEE802.3at), 10/100/1000 Mbps (Intel i211)		
GNSS	System	GPS + BDS		
Audio	Chipset	Realtek ALC892 HD Audio		
	Connectors	Line out, Mic in		
Expansion	Mini PCIe	1 Mini PCIe (Full-size), 2 Mini PCIe (Full-size) w/ USB signal only		
	SIM Socket	2		
Storage	SATA	Default: 3 Internal 2.5" HDD/SSD (RAID 0/1/5) Optional: 1 Internal 2.5" HDD/SSD, 1 Swappable 2.5" HDD/SSD Bay		
	mSATA	1		
	Power Type	AT / ATX		
Power	Power Supply Voltage	9-36 V DC input (3-pin Terminal Connector)		
	Power Connector	3-pin Terminal Block (Supports Ignition Pin); 3-pin Remote Power Connector		
	Fuse	30 A, 58 V max.		
	Power Consumption (Typical)	2.26 A @ 12 V (27.1 W) for Core i7-4700EQ, not including PoE Device and expansion card		
	Power Consumption (Max)	8.33 A @ 12 V (100 W) for Core i7-4700EQ, not including PoE Device and expansion card		
Others	Recovery Button	System Recovery button		
Environment	Operational	-25~70° C (-13~158F) w/ Industrial SSD, w/ Air flow (Humidity: 70° C @ 80% RH Non-condensing)		
	Non-Operational	-40~85° C (-40~185° F) (Humidity: 70° C @ 80% RH Non-condensing)		
	Vibration	Operating: MIL-STD-810G, Method 514.6, Category 4, common carrier US highway truck vibration exposure; Storage: MIL-STD-810G, Method 514.6, Category 24, minimum integrity test		
	Shock	Operating: MIL-STD-810G, Method 516.6, Procedure I, functional shock=20g Storage: MIL-STD-810G, Method 516.6, Procedure V, crash hazard shock test=75g		
Certificate	EMC	CE & FCC Class A, eMARK, ISO 7637-2, EN50155		
	Dimensions (W x H x D)	290 x 91.49 x 238.7 mm (11.42" x 3.60" x 9.40")		
General	Weight	4.75 kg (10.45 lb)		
	Operating System	Windows 7/8, WS7E/P, WES8, Linux kernel 2.6.x or above for Fedora		

Dimensions



Packing List

Description
1 x VBC-6060
1 x Driver CD (Including Manual)
1 x SATA Cable
1 x SATA Power Cable
2 x 3-pin Power Connector
2 x Wallmount Bracket

Ordering Information

Part No.	Description
VBC-6060-1A1	Intel® Core i7-4700EQ w/ 6 USB, 4 COM, DIO, CAN Bus, 1 GbE, 4 PoE, line out, mic in, 1 VGA, 1 DP, 1 HDMI, 1 GPS/BDS
VBC-6060-2A1	Intel® Core i5-4400E w/ 6 USB, 4 COM, DIO, CAN Bus, 1 GbE, 4 PoE, line out, mic in, 1 VGA, 1 DP, 1 HDMI, 1 GPS/BDS
VBC-6060-3A1	Intel® Core i3-4100E w/ 6 USB, 4 COM, DIO, CAN Bus, 1 GbE, 4 PoE, line out, mic in, 1 VGA, 1 DP, 1 HDMI, 1 GPS/BDS

Optional Items

Part No.	Description
KIT-WIFI-BGN-01	Wifi 802.11 bgn module + 1 antenna
KIT-WIFI-AC-01	Wifi 802.11 abgn/ac module + 1 antenna
KIT-WIFI-ACBT-01	Wifi 802.11 abgn/ac/BT4.0 module + 2 antenna
KIT-3G-01	3G (HSPA+) module + 1 antenna
KIT-LTE-01	LTE module + 2 antenna
KIT-GPS-01	GPS antenna
KIT-CAN-CN-01	CAN Connector
KIT-DIO-CN-01	DIO Connector

Arestech

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