

# AIV-QM97V1FL

All new Fanless In-Vehicle system, Intel Core i3/i5/i7 Broadwell U with smart power system, GPS/ 4G LTE/ WiFi/ Bluetooth/ M.2 SSD option module



## Features

- Rugged fanless design
- Support Intel 5th generation Core i Broadwell U processors
- 2 x DDR3L-1600MHz, SO-DIMM, up to 16GB
- Support CAN 2.0A/2.0B protocol and i-Button for driver ID
- HDMI & DVI-D output
- Wide variety of wireless communication options
- M.2 SSD & M.2 4G LTE support



## Specification

### System

CPU	Intel Core i3 5010U / i5 5350U / i7 5650U
Chipset	Intel QM97
Memory	2 x DDR3L-1600MHz, SO-DIMM, up to 16GB (non-ECC)

### Video

Graphic Controller	Intel® HD Graphics 6000
Video Memory	DVMT
Video Interface	1 x HDMI type A connector 1 x DVI-D connector

### Storage

SATA	1 x SATA III port with power connector
SSD	1 x M.2 SSD
Disk Bay	1 x swappable 2.5" SSD bay with Anti-vibration / Anti-shock solution

### Communication

Ethernet	2 x Intel GbE chip via RJ-45 connector (Intel i210IT)
USB	2 x USB 3.0, 2 x USB 2.0
Serial Port	2 x RS232 (2 x DB9) 1 x RS422/RS485 (Select by GPIO)

### I/O

Expansion Slot	mini PCIe Socket supported for WiFi+BT.
GPIO	8-bit GPIO (4 In, 4 Out)
Antenna Hole	1 x SMA for GPS, 1 x SMA for 4G LTE, 2 x SMA for WiFi, 1 x SMA for Bluetooth
SIM	SIM Slot x 1, SIM card changeable without opening case
Security	Support i-Button for driver ID
CAN Bus	Support CAN 2.0A/2.0B protocol

### Software

OS Support	Windows 7, Windows 8.1, Fedora 21, Ubuntu 15.04
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### Others Feature

Audio	Audio Codec (Line-out & MIC)
Hardware Monitor	CPU voltage and temperature
WatchDog Timer	0~255 sec. software programmable
Indicator	Power / HDD/ Stauts LED

### Power Requirement

Power Input	9~32 V (+/-5%) single voltage input, 3 poles terminal block
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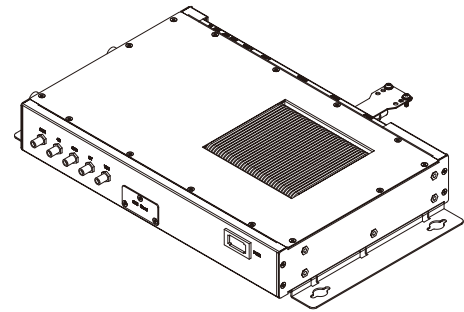
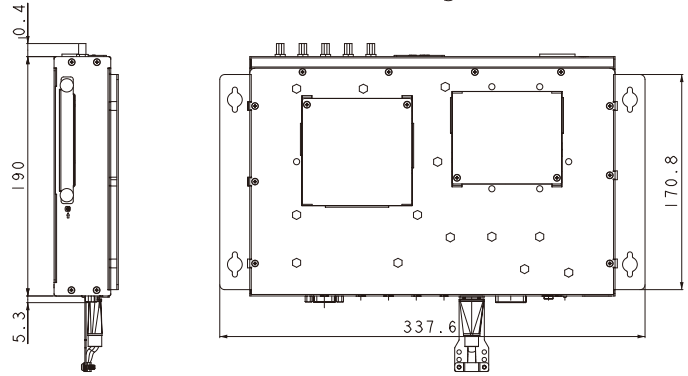
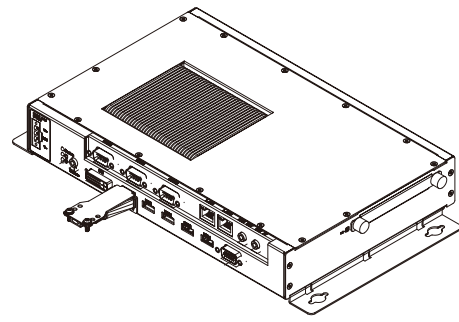
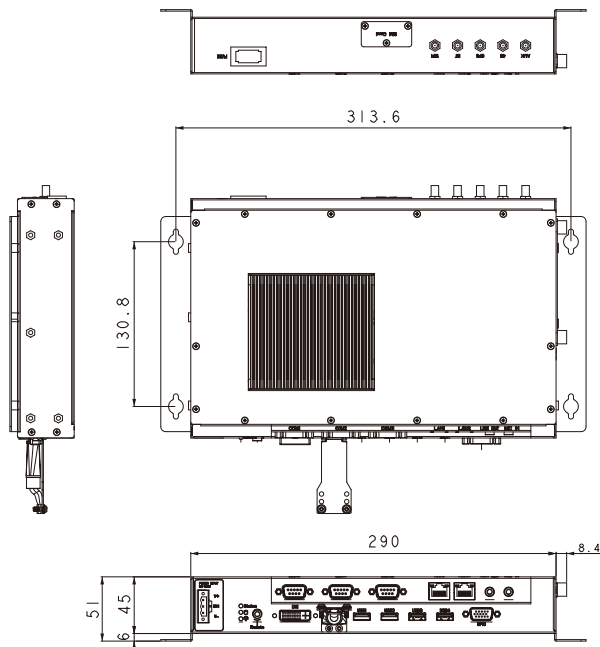
### Mechanical & Environment

Thermal Design	Fanless
Chassis Material	Metal SPGC (Black printing color)+ Aluminum heatsink
Vibration	IEC 60068-2-64, 5~500Hz, 3GRMS(CF/SSD), Operating with SSD
Shock	IEC 60068-2-27, 50G 500m/s <sup>2</sup> 11MS, Operating with SSD
Dimension	290mm x 190mm x 45mm
Weight	4 kg
Operating Temp.	0~60°C
Storage temp.	-40~80°C
Relative Humidity	0~90% @ 40°C, non-condensing
Safety	CE, FCC class B , E-Mark

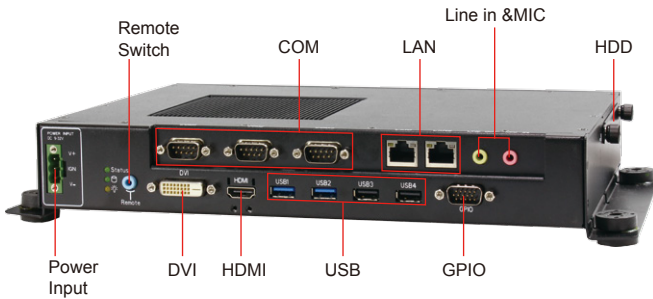
### Smart In-Vehicle Power Management

O/S Anti-Crash	Smart O/S boot/shut-down control by power subsystem
System boot / Shut-down delay	Delay time from 0 seconds to 60 minutes setting in BIOS
Power on/off switches	<ul style="list-style-type: none"> <li>• System power switch by remote cable switch</li> <li>• System power input serial connection to car battery and ignition switch</li> </ul>
Car battery protection	Low battery voltage monitoring and configurable auto shutdown low battery voltage level

## Dimension



## I/O Connectors



## Packing List

- 1 x AIV-QM97V1FL
- 1 x User Guide & System Driver CD
- 1 x Screw pack(2.5" HDD bracket: 4pcs)
- 1 x Terminal block female 3pin
- 1 x Spare Fuse 10A
- 1 x GPIO/CAN/Driver ID DB15 Cable
- 1 x Remote Switch Cable
- HDMI locking bracket

## Ordering Information

AIV-QM97V1FLCi3 AIV-QM97V1FLCi3 with Intel Core i3 5010U

AIV-QM97V1FLCi5 AIV-QM97V1FLCi5 with Intel Core i5 5350U

AIV-QM97V1FLCi7 AIV-QM97V1FLCi7 with Intel Core i7 5650U

## Optional Modules

Sierra EM7430 / EM7455 4G LTE & GPS module

Jwx6058 Qualcomm. (QCA6174A-5) Wi-Fi5+BT5.0

Transcend TS128GMTS800 /M.2 TYPE 2280-D2-B-M / SATA SSD / 128GB