

# AR-V6005FL

Fanless In-Vehicle system, Intel Atom E640  
with smart power onboard, GPS/3.5G/WiFi/Bluetooth option



## Features

- Rugged fanless design
- Support Intel Atom E640 processors with EG20T chipset
- 2GB DDR2 Memory Onboard
- Support CAN 2.0A/2.0B protocol and i-Button for driver ID
- VGA/DVI-D output
- Variety Wireless Communication
- Combo connector to simplify touch monitor installation



## Specification

### System

CPU	Intel Atom E640 1.0 GHz
Chipset	Intel EG20T
Memory	DDR2 memory, 2GB on board

### Video

Graphic Controller	Integrated with Processor
Video Memory	DVMT
Video Interface	1 x DVI connector 1 x Combo connector (VGA/USB/Audio/12VDC)

### Storage

SATA	1 x SATAII connector with power connector
CF	1 x CF slot (Type I/Type II), support UDMA
Disk Bay	1 x 2.5" HDD bay with Anti-vibration / Anti-shock solution

### Communication

Ethernet	1 x Intel GbE Chip via RJ-45 connector
USB	2 x USB 2.0 (1 x External port, 1 x COMBO connector)
Serial Port	2 x RS232 (2 x DB9) 1 x RS232/422/485 (DB9, switch selectable)

### I/O

Expansion Slot	2 x Mini PCIe (For Optional 3.5G / WiFi module only)
GPIO	8-bit GPIO (4 In, 4 Out)
Antenna Hole	1 x SMA for GPS, 1 x SMA for 3.5G, 2 x SMA for WiFi, 1 x SMA for Bluetooth
SIM	1 x SIM Slot, SIM card changeable without opening case
iButton	1-Wire interface for driver ID and sensors
CAN Bus	Support CAN 2.0A/2.0B protocol

### Software

OS Support	Fedora 14, Ubuntu 10
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## Others Feature

Audio	Audio Codec (Line-out & MIC)
Hardware Monitor	CPU voltage and temperature
WatchDog Timer	1~255 sec. software programmable
Indicator	Power / HDD / Status LED

## Power Requirement

Power Input	9~32 V (+/-5%) single voltage input, 3 pole terminal block
Power Consumption	Max 19W

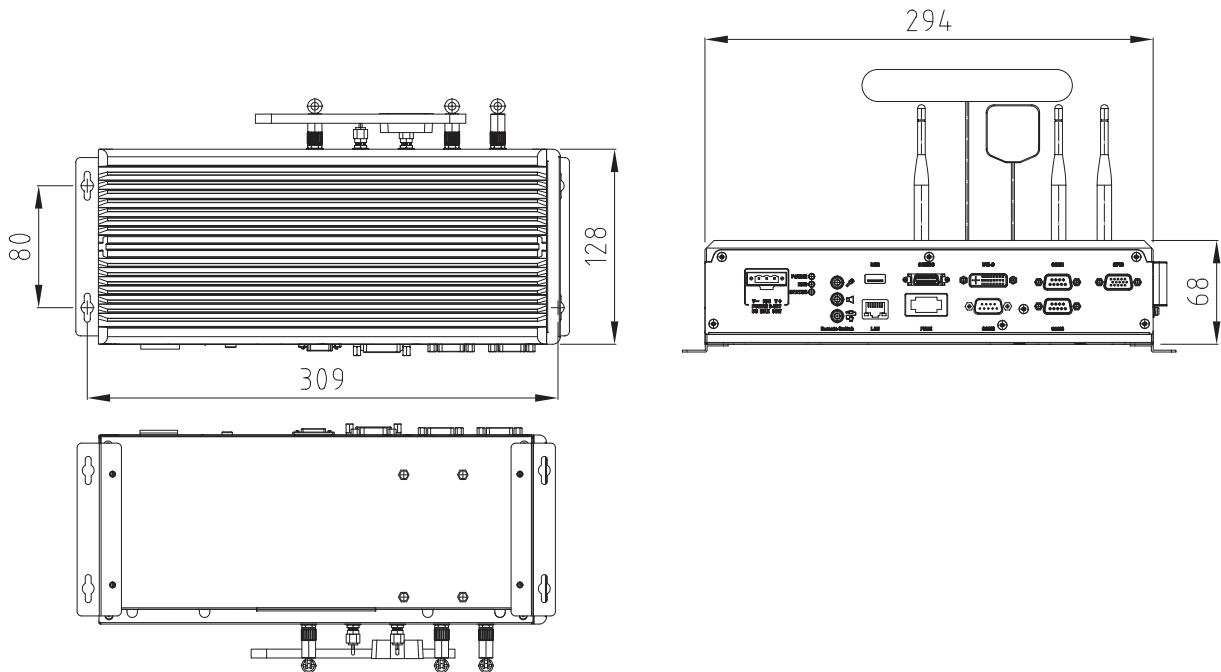
## Mechanical & Environment

Thermal Design	Fanless
Chassis Material	Metal SPGC
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	294mm x 128mm x 68mm
Weight	2.4 kg
Operating Temp.	0~60°C (32~140°F) for SSD
Storage temp.	-40~80°C (-40~176°F)
Relative Humidity	0~90% @ 40°C, non-condensing
Safety	CE, FCC class B, E-Mark

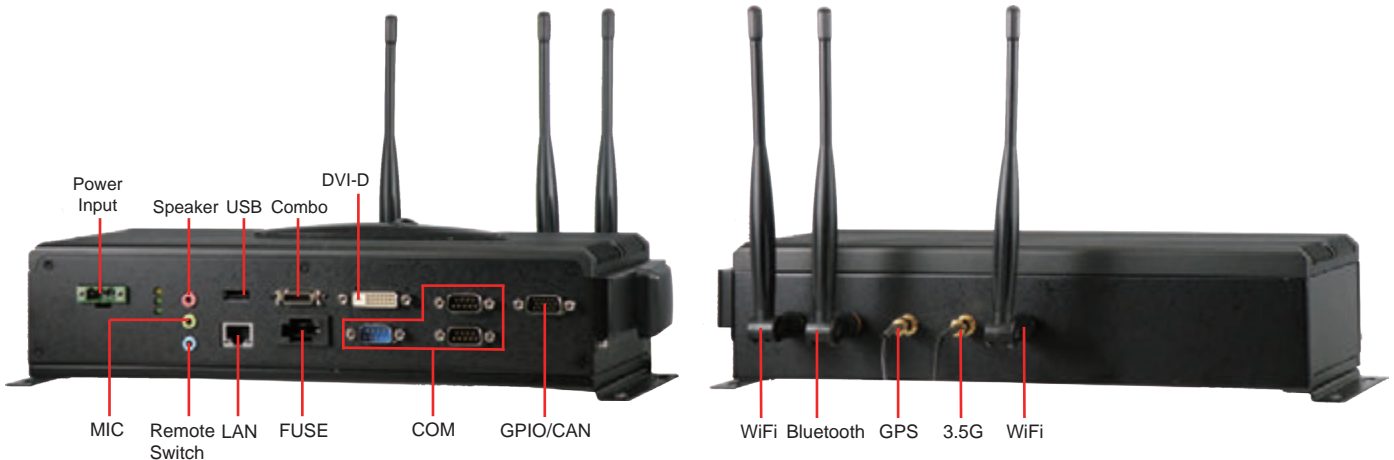
## Smart In-Vehicle Power Management

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
System boot fail retry	3 times boot fail retry
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 AR-V6005FL
- 1 x User Guide & System Driver CD
- 2 x Wall Mount Bracket
- 1 x Screw pack(2.5"HDD bracket: 4pcs)
- 1 x Terminal block female 3pin
- 1 x Spare Fuse 7.5A
- 1 x Remote Switch Cable
- 1 x GPIO/CAN/Driver ID DB15 Cable
- 1 x One to Many Combo Cable

## Ordering Information

AR-V6005FL	AR-V6005FL with Intel Atom E640 1.0GHz, 2GB on board
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## Optional Modules

100070072	Sierra MC8705 with RF cable, Cable Antenna
100070074-01	Wieson G5020-1 GPS module with RF Cable, Cable Antenna (L=5M)
100070070	Qcom QBTM400-01 bluetooth module with RF Cable, Antenna
100070092	Sparklan WPEA-252NI WiFi Module Industrial Temperature, RF Cable Antenna x 2