

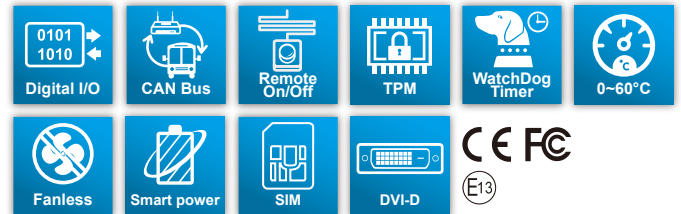
# AIV-APL1V1FL

New Intel Pentium-N4200 Fan Less In-Vehicle Computer



## Features

- Rugged fan-less design
- Support New Intel Pentium N4200 processors
- 1 x DDR3L 1866 MHz SO-DIMM, up to 8GB
- Support CAN 2.0A/2.0B & J1939 protocol(Optional)
- VGA & DVI video output
- Support 4 Channel analog Capture card
- 2 x swappable 2.5" HDD bay
- TPM 1.2 / 2.0
- Variety Wireless Communication



## Others Feature

WatchDog Timer 1~255 sec. software programmable

## Software

OS Support Windows 10 (64 bit)& Linux kernel to 4.4 or above(64 bit)

## Power Requirement

Power Input 9~36 V

## Mechanical & Environment

Dimension 260mm x 195mm x 63mm  
 Operating Temp. -25°C ~ 60°C  
 Vibration IEC 60068-2-64, 5~500Hz, 3GRMS(SSD)  
 Shock IEC 60068-2-27, 50G 500m/s<sup>2</sup> 11MS  
 Storage Temp -40~80°C (-40~176°F)  
 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
 

- System power switch by remote cable switch
- System power input serial connection to car battery and ignition switch

 Car battery protection Low battery voltage monitoring and configurable auto shutdown low battery voltage level

## Specification

### System

CPU	Intel® Pentium™-N4200
Chipset	Intel Apollo lake SoC
Memory	1 x DDR3L 1866 MHz ,SO-DIMM, support up to 8GB

### Video

Graphic Controller	Intel HD Graphics 505
Video Interface	1 x VGA port (DB15) ,1 x DVI

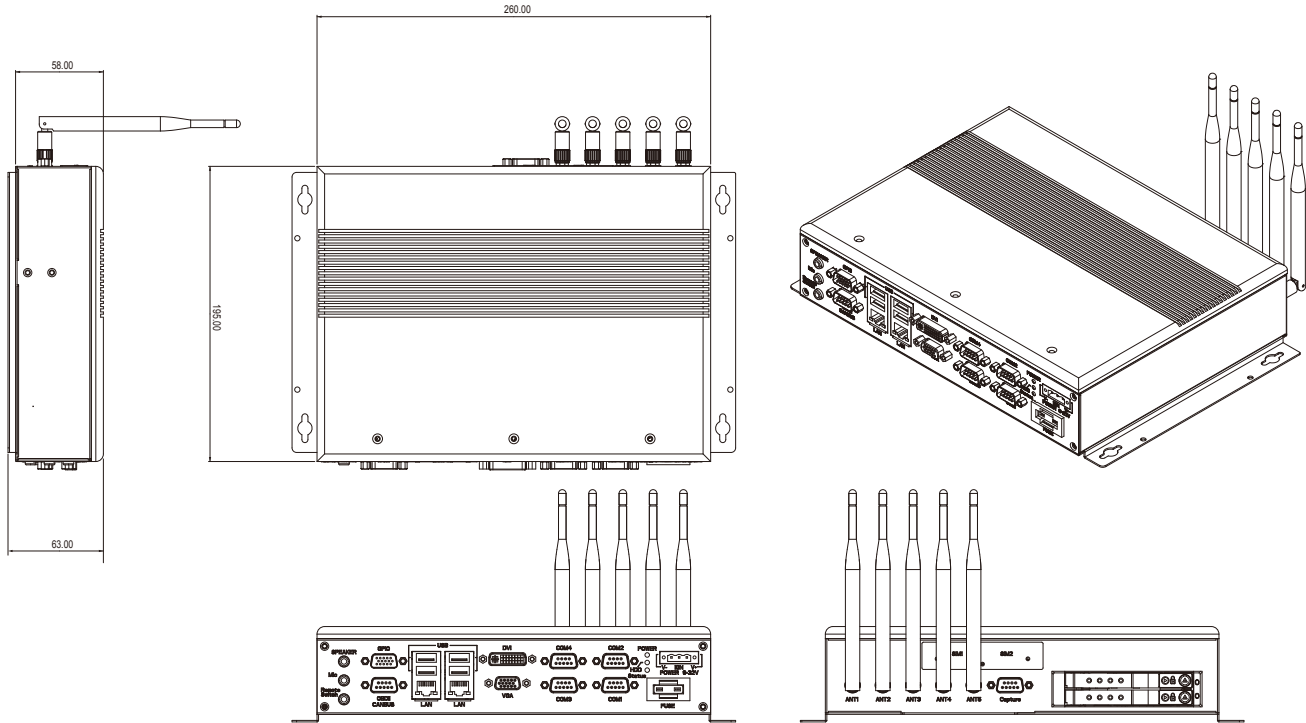
### Storage

SATA	2 x SATA III port
Disk Bay	2 x swappable 2.5" Disk bay with Anti-vibration/ Anti-shock solution for SSD only

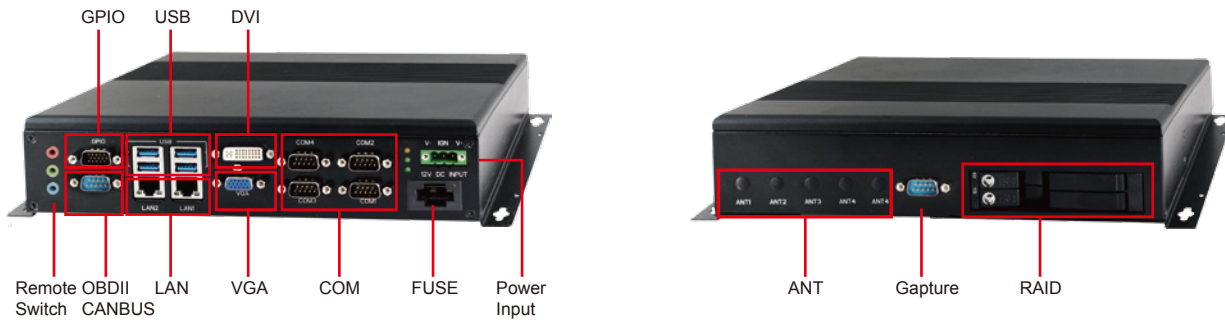
### I/O

Expansion Slot	3 x Mini PCI-e(Reserve for Wi-Fi and 4G LTE)
Ethernet	2 x GbE RJ45, Intel i210AT
Serial Port	1 x RS-232/422/485 3 x RS-232
USB	4 X USB 3.0
GPIO	8-bit GPIO (4 In, 4 Out)
Audio	1 x MIC in 1 x Audio out
Antenna Hole	1 x SMA for GPS 1 x SMA for 4G 2 x SMA for Wi-Fi & Bluetooth
SIM	SIM Slot x 2, SIM card changeable without opening case, latch to protect SIM uncertainly touch
CAN BUS	DB9 connector, support CAN 2.0A/2.0B protocol (J1939 for optional)
TPM	On-board TPM 1.2 / 2.0(Optional)

## Dimension



## I/O Connectors



## Packing List

- 1 x AIV-APL1V1FL
- 1 x User Guide CD with driver
- 1 x GPIO/CAN Cable
- 1 x Terminal block (Plug-DC connector)
- 1 x Remote Switch Cable
- 1 x Antenna for GPS (option)
- 2 x Antenna for Wi-Fi & Bluetooth (option)
- 1 x Antenna for 4G LTE (option)
- 1 x Spare Fuse

## Ordering Information

AIV-APL1V1FL-PT1 AIV-APL1V1FL- Intel Pentium N4200+CAN 2.0  
 AIV-APL1V1FL-PT1OB AIV-APL1V1FL- Intel Pentium N4200+OBD II

## Optional Modules

EC20/EC25	Quectel 4G + GPS + Glonass module
MC7304/MC7354	Sierra 4G + GPS + Glonass module
RTL8812AEACC-01	Realtek (2T2R) Wi-Fi+BT a/b/g/n/ac
251NBT	Sparklan (2T2R) Wi-Fi+BT a/b/g/n
SC330N4	Yuan Analog Capture card 4ch With Testing Cable
G-SenSor	G-SenSor board