Atlas Embedded PC 200I-101F1E5

Datasheet

Date 2024-04-02

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Product manual revision records

Revised version	Revised date	Revised contents	Hardware version
V 1.0	2024-04-03	Create the document	V 1.0

Product hardware revision history

Hardware version	Revised date	Revised contents
V 1.0	2024-04-03	Initial version

Electronic components and circuits are very sensitive to electrostatic discharge, although the company will design the main interface on the board card to do anti–static protection design, but it is difficult to do anti–static safety protection for all components and circuits. Therefore, it is recommended that you take ESD safety measures when handling any circuit board component.

ESD safety measures include but are not limited to the following:

1. Put the card in an ESD bag during transportation or storage. Do not take out the card until installation and deployment.
2. Before touching the board, release the static electricity stored in the body: Wear a grounding wrist strap.
3. Operate circuit boards only in electrostatic discharge safe areas.
4. Avoid moving circuit boards in carpeted areas.
5. Avoid direct contact with electronic components on the board through edge contact.

CONTENS

1 Introduction

Atlas 2001-101F1E5 AI computing platform (200I-101F1E5 for short), can be widely used in smart park, machine vision, security, V2X and other AI scenarios, it has high performance, high efficiency, low cost, high reliability and other advantages, abundant interface, and the main interfaces are designed for electrostatic safety protection.

- **Appearance**

2 Product Specification

Module	Ascend Atlas 200I A2 module
Dimensions (W+H+D)	202mm x 170mm x 65.5mm (Including I/O ports and mounting holes)
Power Supply	DC 19V
OS	openEuler/Ubuntu

Item	**Specification**
Temperature	-20° C~60° C

I/O Feature

Interface	**Quantity**	**Interface**	**Quantity**
USB 3.0 Type-A	2	Ethernet	1
USB Type-C	1	HDMI	1
TF Card slot	1	Nano SIM Card slot	1

Expansion

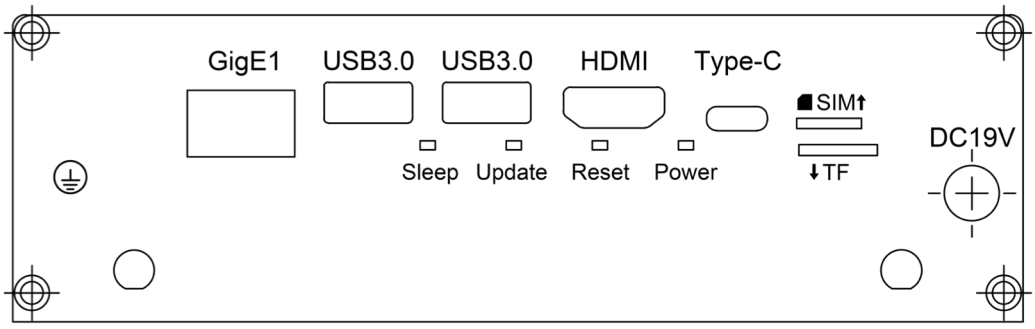
SATA	**5G module**	**WIFI module**	**NVMe**
✓	✓	✓	✓

3 Module Specification

Ascend Atlas 200I A2 module

	20 TOPS 12GB	20 TOPS 8GB	8 TOPS 4GB
AI Compute Power	20 TOPS INT8 10 TFLOPS FP16		8 TOPS INT8 4 TFLOPS FP16
Memory	LPDDR4X Capacity: 20GB Bit width: 96bits Rate: 4266 Mbps Error checking and correcting (ECC)	LPDDR4X Capacity: 8GB Bit width: 64bits Rate: 4266 Mbps Error checking and correcting (ECC)	LPDDR4X Capacity: 4GB Bit width: 64bits Rate: 4200 Mbps Error checking and correcting (ECC)
CPU Computing Power	4 x 1.6 GHz cores		
Encoding/ Decoding	H.264/H.265 hardware decoding: 40-channel 1080p 30 FPS, 4-channel 4K 75 FPS (3840 x 2160) H.264/H.265 hardware encoding: 20-channel 1080p 30 FPS, 3-channel 4K 50 FPS (3840 x 2160) JPEG decoding: 1080p 512 FPS; encoding 1080p 256 FPS; Max. resolution: 16384 x 16384		H.264/H.265 hardware decoding: 20-channel 1080p 30 FPS, 2-channel 4K 75 FPS (3840 x 2160) H.264/H.265 hardware encoding: 12-channel 1080p 30 FPS, 2-channel 4K 50 FPS (3840 x 2160) JPEG decoding: 1080p 512 FPS; encoding 1080p 256 FPS; Max. resolution: 16384 x 16384
Power	25W	25W	21W
Audio/Video Interface	2 x HDMI, MIPI-CSI: 8 lanes, MIPI-DSI: 4 lanes, 2 x I2S, 1 x Analog audio input/output		
Temperature	-20°C to 80°C(-4°F to 176°F)		
Dimensions	Using the MXM connector: 7 mm x 82 mm x 60 mm (0.28 inch x 3.23 inch x 2.36 inch)		
OS	openEuler /Ubuntu		

4 Ports on the Front Panel



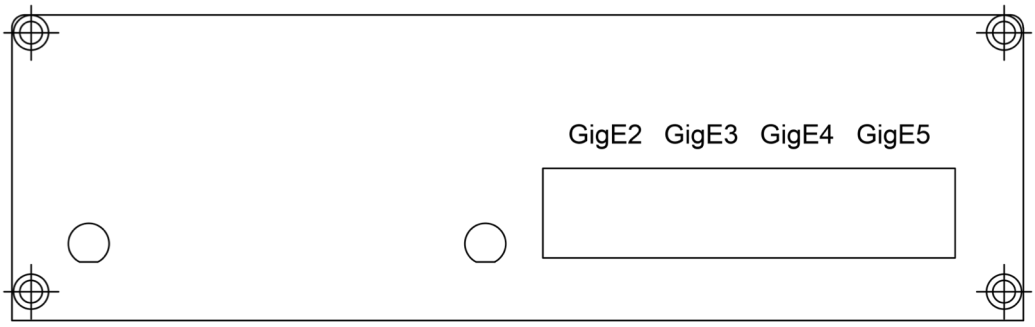
Description of ports on the front panel

Name	Quantity	Description
SIM	1	Nano SIM card slot
GigE1	1	Ethernet Jack(10/100/1000Mbps Ethernet), RJ45 connector
TF	1	TF card slot
HDMI	1	HDMI Type-A connector
Type-C	1	USB Type-C
USB 3.0	2	USB 3.0 Type-A

Indicators and Buttons on the Front Panel

Name	Quantity	Name	Quantity
Sleep	1	Update	1
Reset	1	Power	1

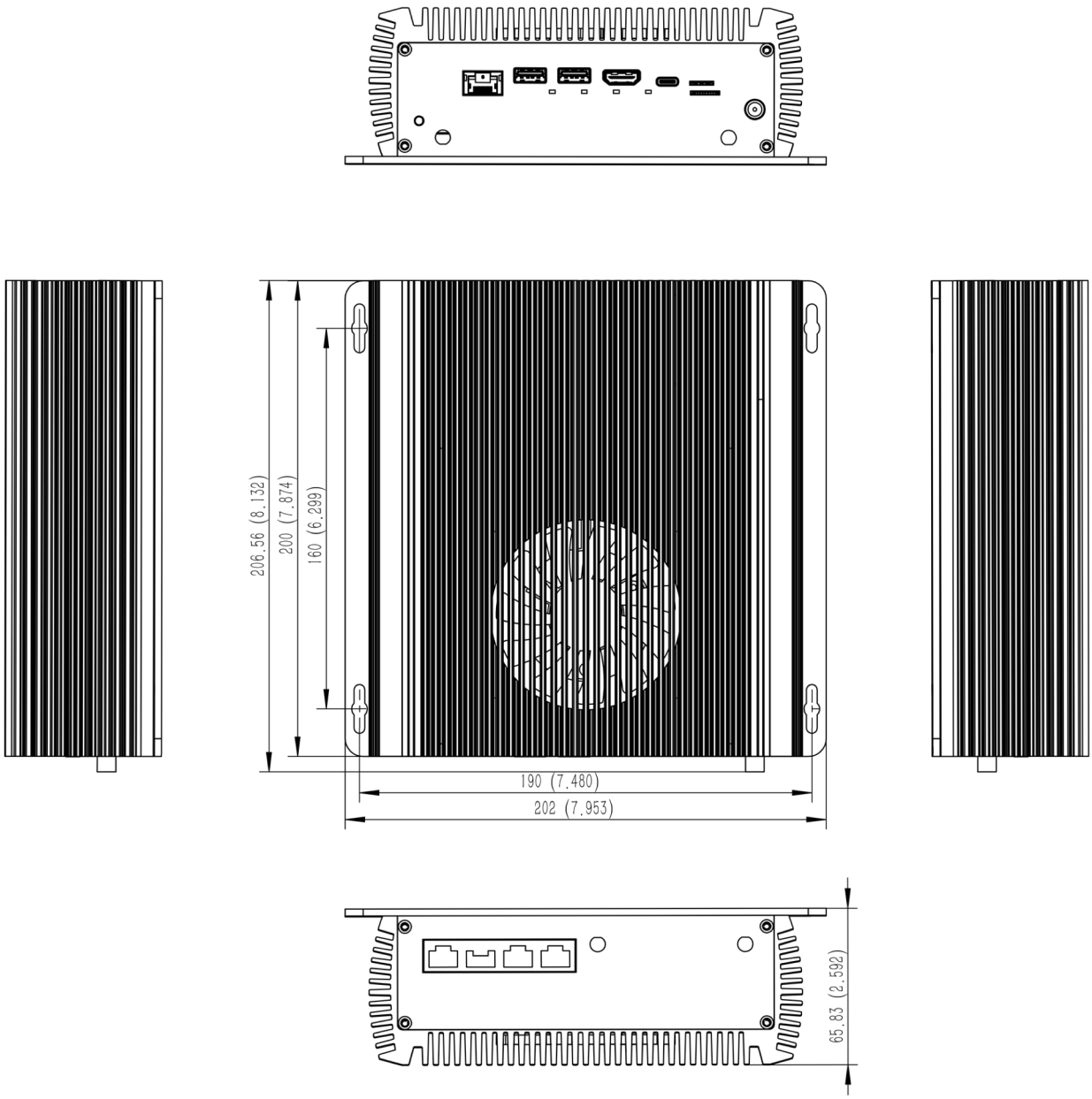
5 Ports on the Rear Panel



Description of ports on the rear panel

Name	Quantity	Description
GigE2	1	Ethernet Jack(10/100/1000Mbps Ethernet), RJ45 connector
GigE3	1	
GigE4	1	
GigE5	1	

6 Dimensions



7 Method of Application

• Make sure all external system voltages are turned off.

• Install necessary external cables.

(such as: the display line connected to the HDMI, the input line for the system power supply, the USB cable connecting the keyboard and mouse...)

• Connect the power cord to the power supply

• The default system is automatically powered on. It can also be set as a switch start, for specific methods, please consult our sales and technicist.

Order Information

Model	Description
200I-101F1E5	Module：Ascend Atlas 200I A2

The 200I-101F1E5 does not include other functional modules as standard,

If you need to expand, please contact us

Special Version

• Initial system user：HwHiAiUser, password：Mind@123.

• If root permission is required, you can use sudo or su root to enter the root user..

• To install required software packages, run the following command. Do not replace or modify the default software source before installation:

- sudo apt-get update
- sudo apt-get install Specifies the name of the software package

• More information：www.plink-ai.com