### Atlas Embedded PC 200I-DEV Datasheet

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#### Beijing Plink-Al Technology Co., LTD

#### Web: <u>http://www.plink-ai.com/</u>

Add: Room 1106/1108, Jinyu Jiahua Building, Shangdi 3rd Street, Haidian District, Beijing, China Tel: +86 010-62962285/400-127-3302

#### 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 Introduction5
2 Product Specification6
I/O Feature6
Expansion6
3 Developer Kit Parameter7
4 Ports on the Front Panel8
<u>5 Dimensions9</u>
6 Method of Application10
Order Information10
Special Version10

## 1 Introduction

Atlas 2001 DEV takes Atlas 2001 A2 acceleration module as the core. It is a product for algorithm verification and application development scenarios for AI developers. It has features such as rich hardware interfaces, rich reference codes and algorithm models, and full process coverage of tools. Meet the needs of AI technology learning, AI teaching practice, creative application development, industry algorithm verification and other scenarios.

#### Appearance



# 2 Product Specification

Module	Ascend Atlas 200I A2 module
Dimensions (W+H+D)	190mm x 158mm x 70.75mm (Including I/O ports and mounting holes)
Weight	881g
Power Supply	DC 12V
OS	openEuler/Ubuntu

Item	Specification
Temperature	-20° C~60° C

#### I/O Feature

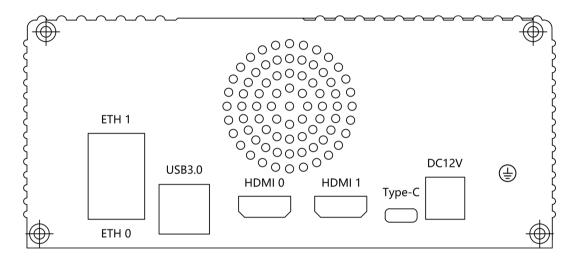
Interface	Quantity	Interface	Quantity
USB 3.0 Type-A	2	Ethernet	2
USB Type-C	1	HDMI	2

# 3 Developer Kit Parameter

### Ascend Atlas 2001 A2 module

AI Compute Power	8 TOPS INT8 4 TFLOPS FP16
CPU Computing Power	4 x 1.0 GHz cores
Memory	LPDDR4X Capacity: 4GB Bit width: 64bits Rate: 4200 Mbps Error checking and correcting (ECC)
Encoding/ Decoding	H.264/H265 Decoder, 20-Channel 1080P(1920x1080) 30 FPS, YUV420 H.264/H265 Decoder, 2-Channel 4K(3840x2160) 75 FPS, YUV420 JPEG Decoding:1080P(1920x1080) 512 FPS; Encoding: 1080P(1920x1080) 256 FPS; MAX. resolution: 16384x16384
Extended Interfaces	2 x MIPI-CSI 51-pin connectors for camera modules 1 x MIPI-DSI 51-pin connectors 2 x RJ45 network ports, 100/1000 Mbit/s auto-sensing 2 x HDMI 2 x USB 3.0 Type-A, compatible with USB 2.0 1 x USB 3.0 Type-C One group of 40-pin extended connectors
Max Power	36w
Storage Interfaces	1 x Micro SD 1 x M.2 Key connector, with 1x NVMe SSD supported
Temperature	-20°C~60°C
OS	openEuler /Ubuntu

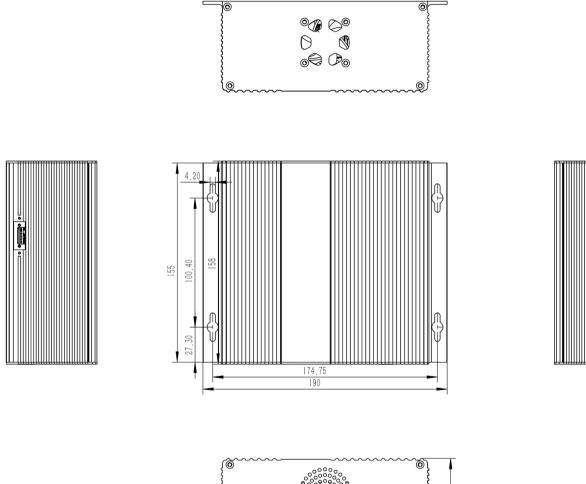
## **4** Ports on the Front Panel

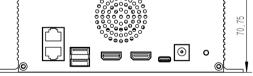


#### Description of ports on the front panel

Name	Quantity	Description
ЕТН	2	Ethernet Jack(10/100/1000Mbps Ethernet), RJ45 connector
HDMI	2	HDMI Type-A connector
Туре-С	1	USB Type-C
USB 3.0	2	USB 3.0 Type-A

# 5 Dimensions





## 6 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-DEV	Module: Ascend Atlas 200I A2

The 200I-DEV 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