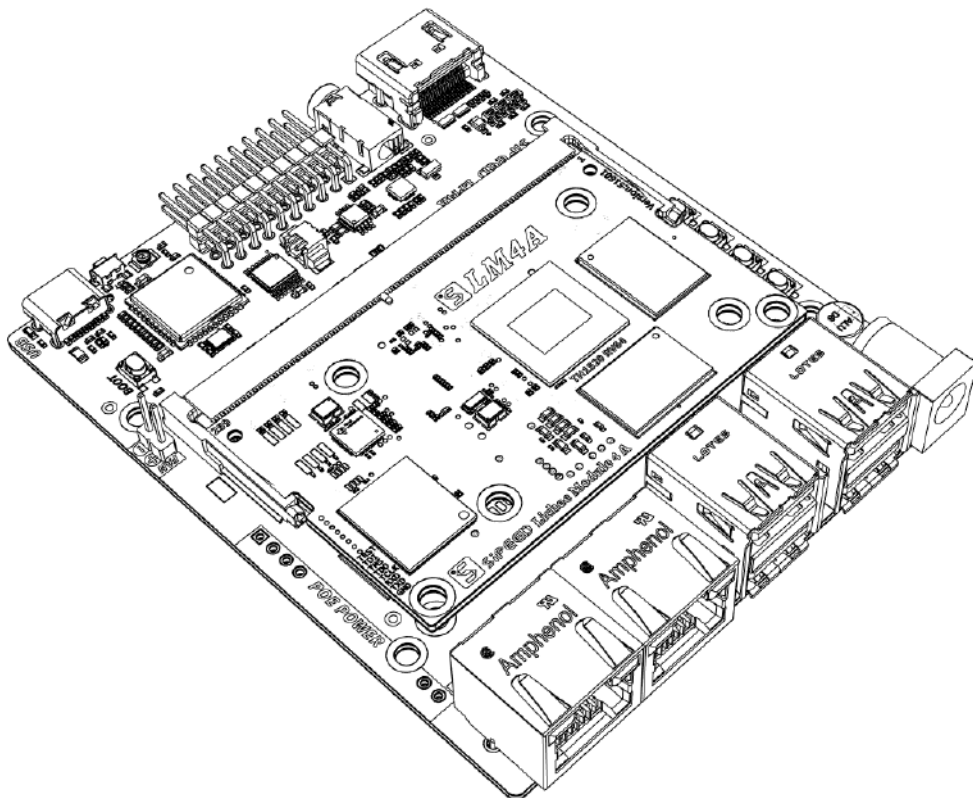




LPI4A DataSheet

V1.0



Revision History

<i>Date</i>	<i>Revision</i>	<i>Description</i>
2023-03-13	0.1	Initial Release
2023-04-13	1.0	Additional relevant information

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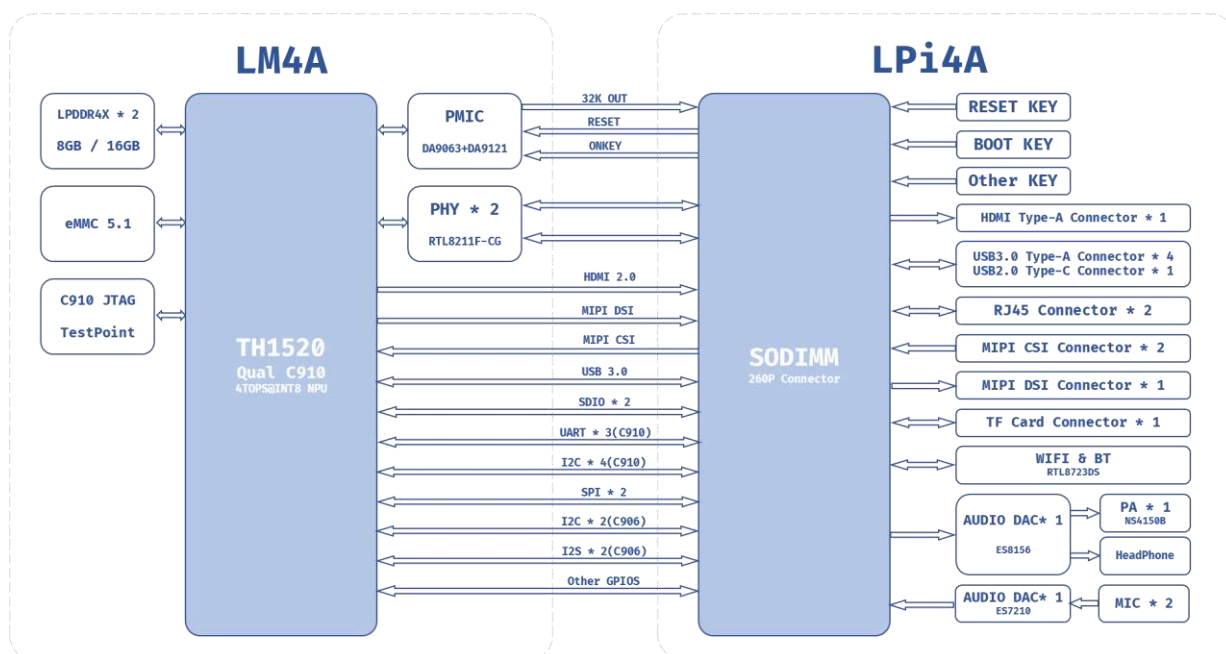
Contents

- Revision History.....2
- Warranty Disclaimer3
- Contents4
- Overview.....5
- 1 Key Specifications.....6
- 2 Dimensions and Interfaces7
 - 2.1 Size and Structure.....7
 - 2.2 Physical Picture8
 - 2.3 Function Description9
- 3 Contact and information10
- 4 Operating Precautions.....11

Overview

The Lichee Pi 4 A (LPi4A) is a single board computer powered by the Pinto TH1520 processor. It includes a quad-core RISC-V 64GCV instruction set architecture C910@1.85GHz; NPU support of 4TOPS@INT8 algorithm; display output support of 4K@30fps resolution and multiple simultaneous audio and video encoding and decoding; dual Gigabit Ethernet and USB3.0 support; and audio processing using a single core C906.

LPi4A block diagram

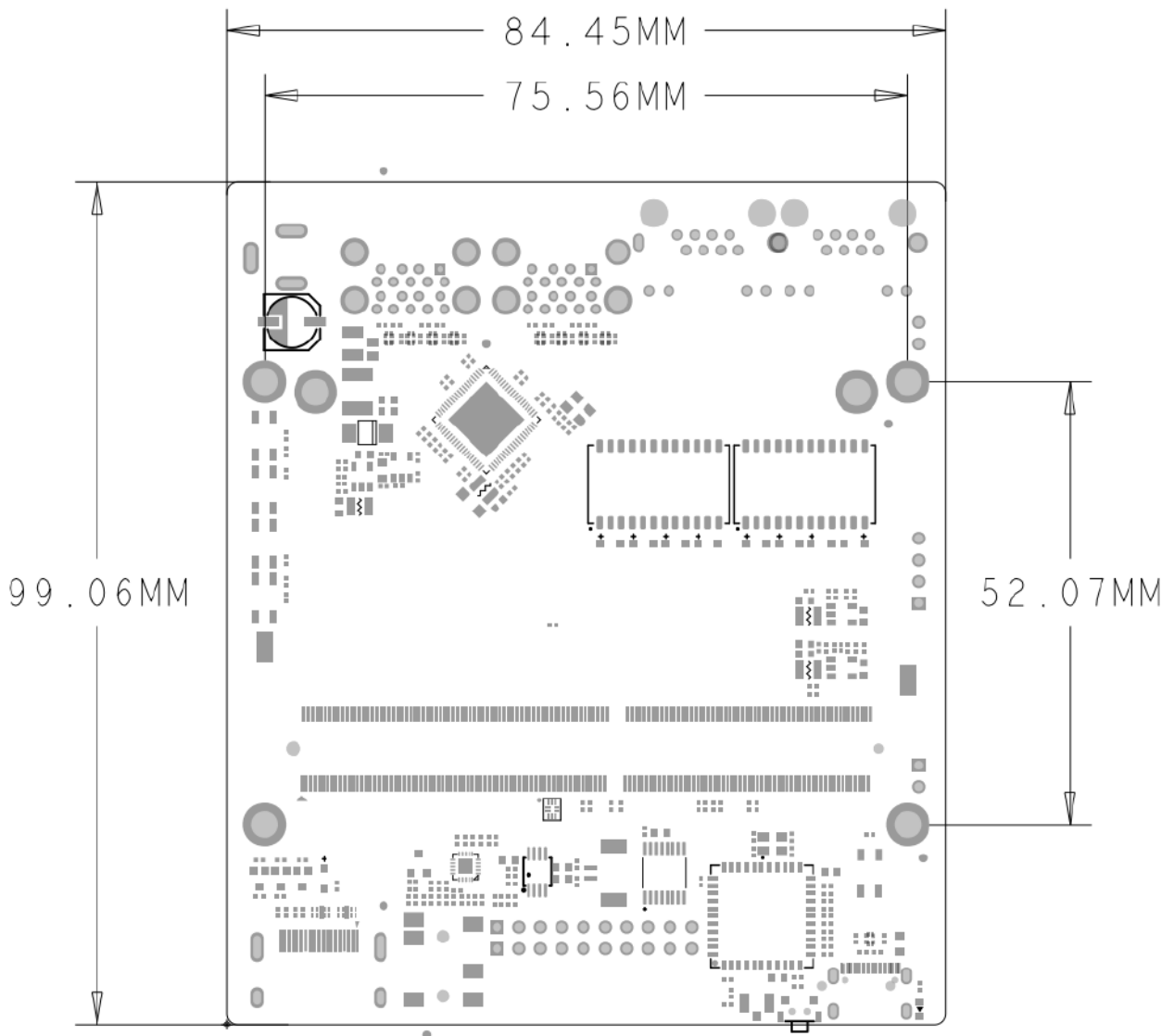


1 Key Specifications

Parameter	Description
CPU	TH1520 RISC-V 4 x C910@1.85GHz
GPU	OpenGL ES 3.2 OpenCL 1.2 Vulkan 1.2
NPU	4TOPS@INT8
Memory	8GB/16GB LPDDR4X(3733MHz)
Storage	TF card/eMMC
Video	1 x HDMI 1 x 4-lane MIPI DSI
Camera	2 x 2-lane MIPI CSI 1 x 4-lane MIPI CSI
Ethernet	2 x Gigabit Ethernet ports
Power over Ethernet	Support(Optional Accessories)
Wi-Fi/Bluetooth	RTL8723DS, 802.11b/g/n, 1x1 MIMO, BT4.2
Audio	1 x HeadPhone 1 x Speaker 2 x MIC
USB	4 x USB Type-A 3.0 Host 1 x USB Type-C 2.0 Device (Only For Download)
GPIOs Header	3 x UART, 1 x I2C, 1 x SPI 1 x 5V, 1 x 3.3V, 2 x GND Others
OS	Debian Porting: deepin, ubuntu, openwrt
Power Input	DC12V/2A at least
Operating temperature	-20°C ~ 60°C
Size	99 x 84.5 mm

2 Dimensions and Interfaces

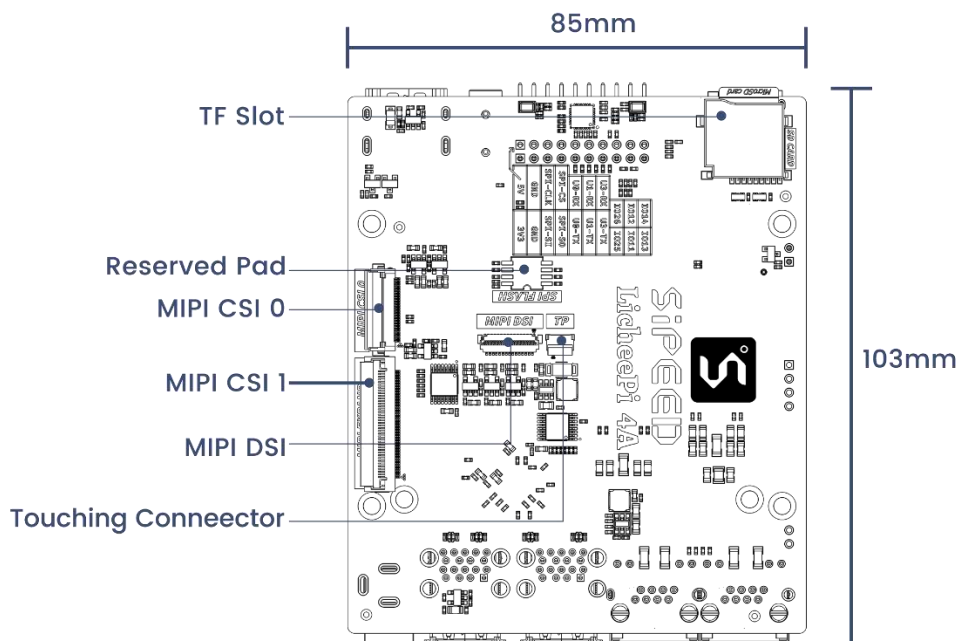
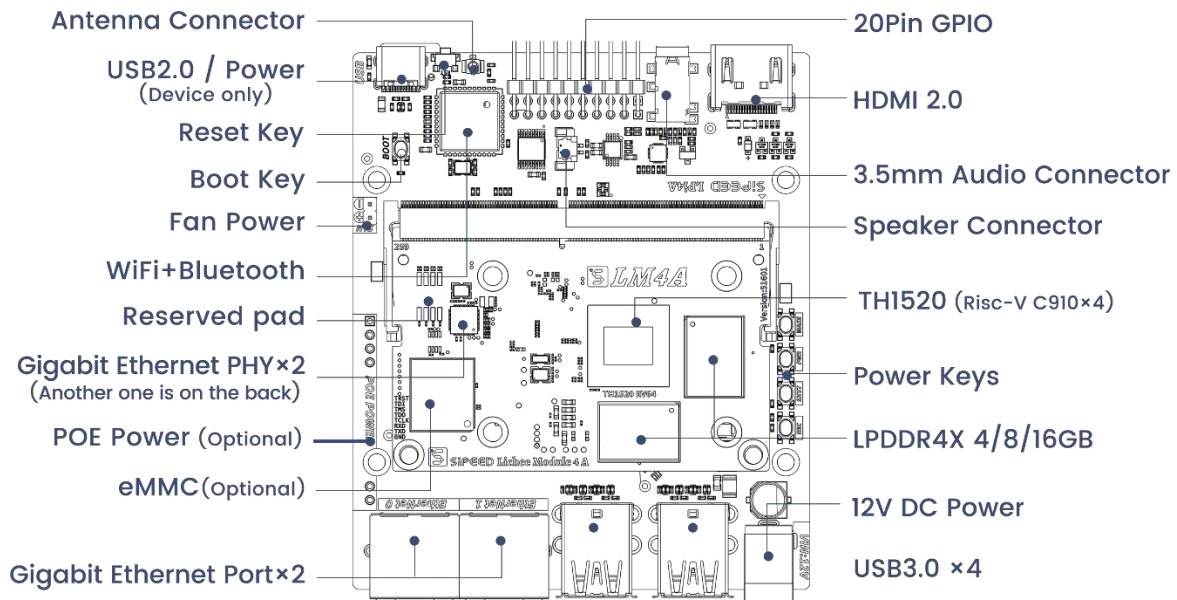
2.1 Size and Structure



2.2 Physical Picture



2.3 Function Description



3 Contact and information

Item	Description
Documentation	wiki.sipeed.com/licheepi4a
QQ	559614960
Github	https://github.com/sipeed/LicheePi4A
Telergram	https://t.me/linux4rv
BBS	bbs.sipeed.com
Business Email	support@sipeed.com

4 Operating Precautions

During the use of this product, attention must be paid to operation safety and maintenance, otherwise it may cause damage to the product, shorten its service life, and even endanger personal safety. For safe use and maintenance, attention should be paid to the following aspects:

- This product is a high-precision electronic product. Please do not collide or fall.
- Although the Class1 laser used in this product meets the safety standards for human eyes, it is not recommended to look directly at the laser for a long time to avoid discomfort.
- Do not place this product in a place with high temperature or direct sunlight.
- Do not disassemble or modify this product without permission to prevent damage to the components of the product.
- Do not touch the product to avoid leaving fingerprints and other pollutants affecting the image effect.
- Please keep this product out of the reach of children to prevent accidents.
- Please follow the manual for correct and safe operation.