
Radxa Penta SATA HAT

A Complete NAS Solution

Revision 1.1

2024-01-26



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1 Revision Control Table

Version	Date	Changes from previous version
1.0	19/04/2023	Update information
1.0	26/01/2024	Compatible with Raspberry Pi 5

2 Introduction

Radxa Penta SATA HAT is an additional HAT designed for ROCK Series and Raspberry Pi 5. It utilizes the high-speed PCIe buses on ROCK Series or Raspberry Pi 5 and provides a complete NAS solution based on ROCK Series or Raspberry Pi 5.



Figure 1: *Radxa Penta SATA HAT*

Currently Supported Products:

- ROCK 3A
- ROCK 3C
- ROCK 4A / 4B
- ROCK 4A+ / 4B+
- ROCK 4SE
- ROCK 5A

- **Raspberry Pi 5**

3 Features

- Up to 5x HDD, support 2.5inch or 3.5inch HDD, up to 100T Storage
- 4x SATA + 1x eSATA with power
- Utilize PCIe Buses on ROCK Series and Raspberry Pi 5
- Two options for power supply
 - External standard ATX power supply support for HDD and SBCs
 - 12V DC power input for 2.5/3.5 HDD power and SBCs
- Support HDD suspend mode
- Support software RAID 0 / RAID 1 / RAID 5
- Optional PWM control fan for HDD heat dispatching
- Optional OLED display for IP/Storage info

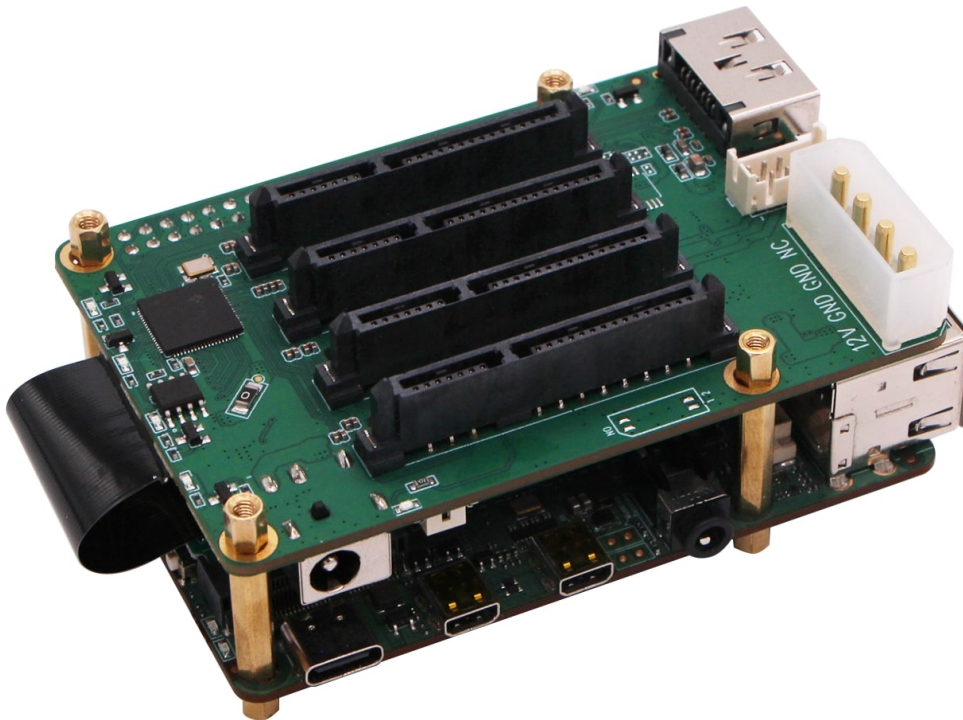
4 Package List

- Radxa Penta SATA HAT
- eSATA Cable
- Acrylic plate for HDD fixing
- Adapter Board / FPC Cable
- Screws for fixing

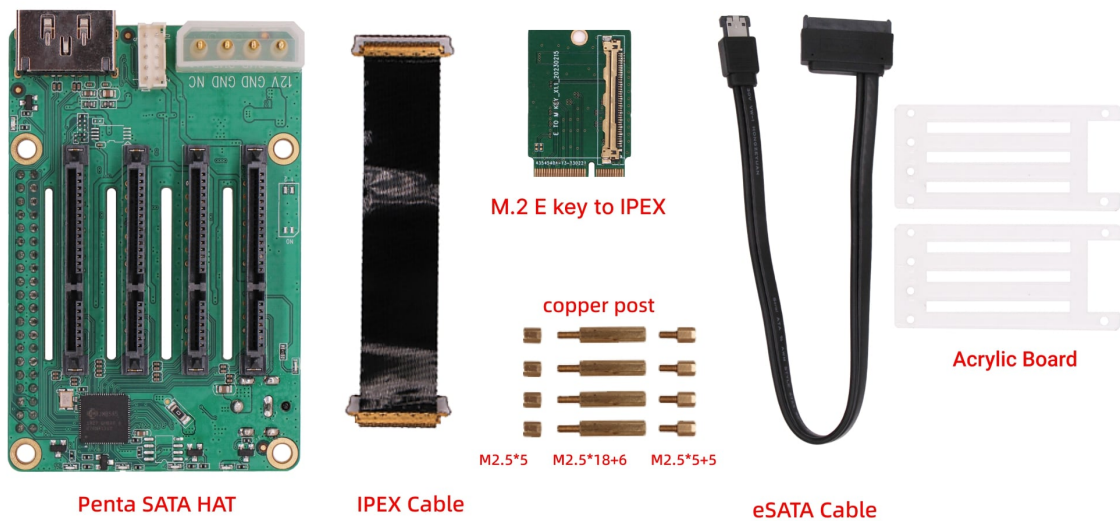
Note: The following products require an adapter board to support Penta SATA HAT.

adapter board	Applicable Products
ROCKPI M2 to IPEX	ROCK 3A / 4A / 4B / 4A+ / 4B+ / 4SE
M.2 M Key to IPEX	ROCK 3C
M.2 E Key to IPEX	ROCK 5A

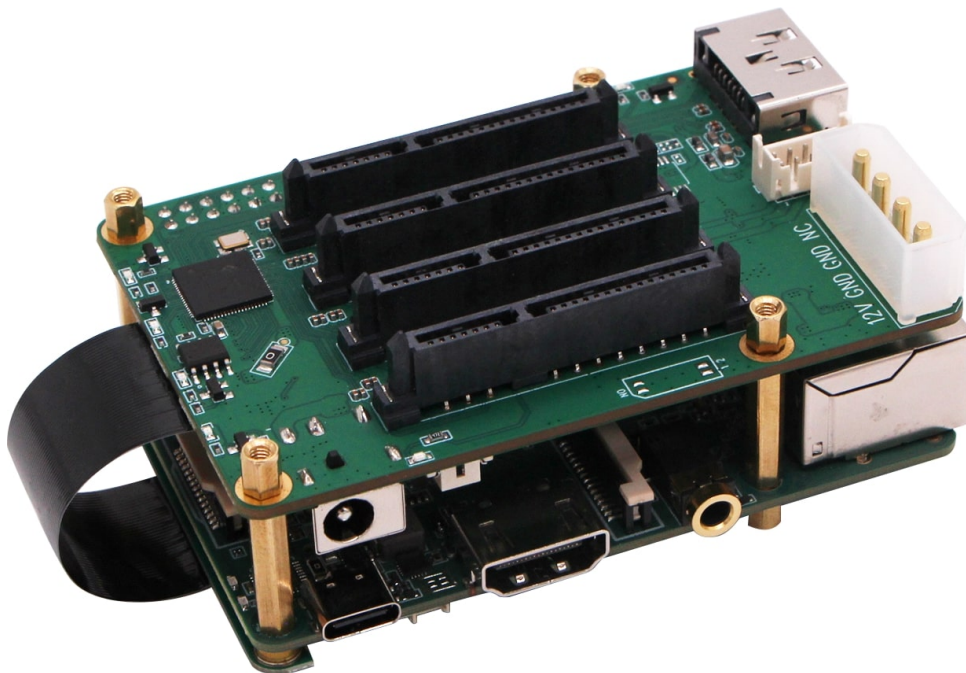
4.1 M.2 E Key to IPEX



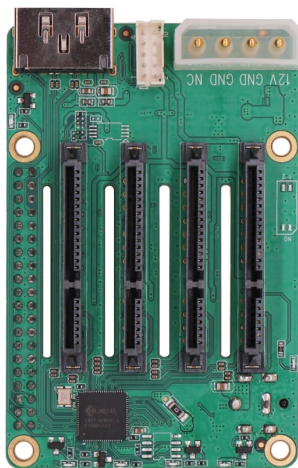
Radxa Penta SATA HAT for ROCK 5A



4.2 ROCKPI M2 to IPEX



Radxa Penta SATA HAT for ROCK 4A / 4B / 4A+ / 4B+ / 4SE / 3A



Penta SATA HAT



IPEX Cable



ROCKPI M.2 to IPEX

copper post



M2.5*5 M2.5*18+6 M2.5*5+5

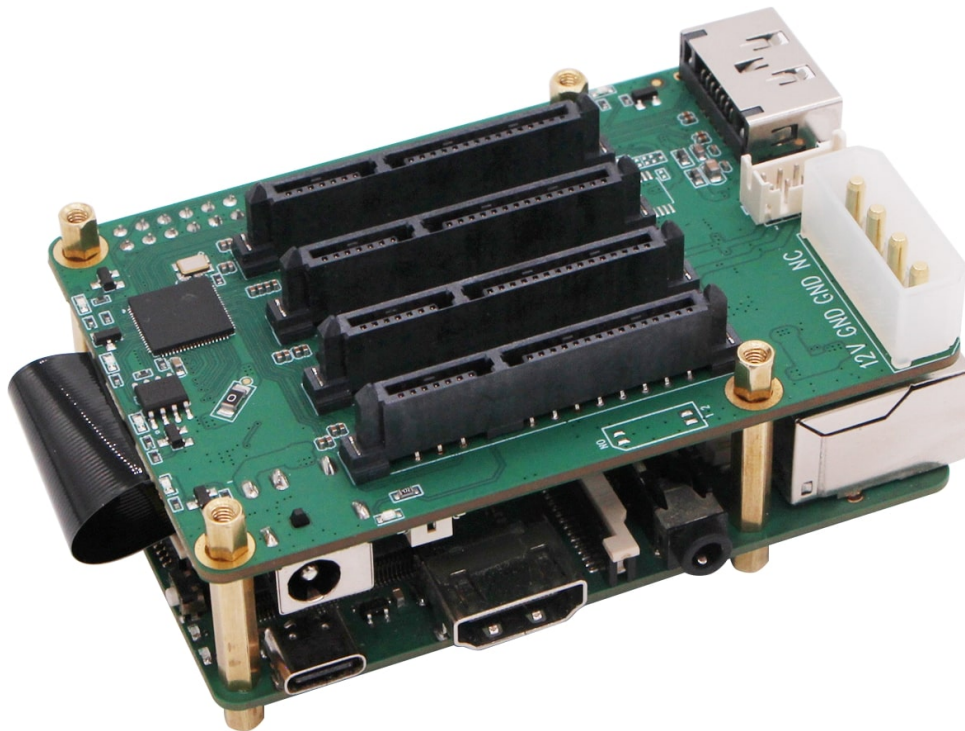


eSATA Cable



Acrylic Board

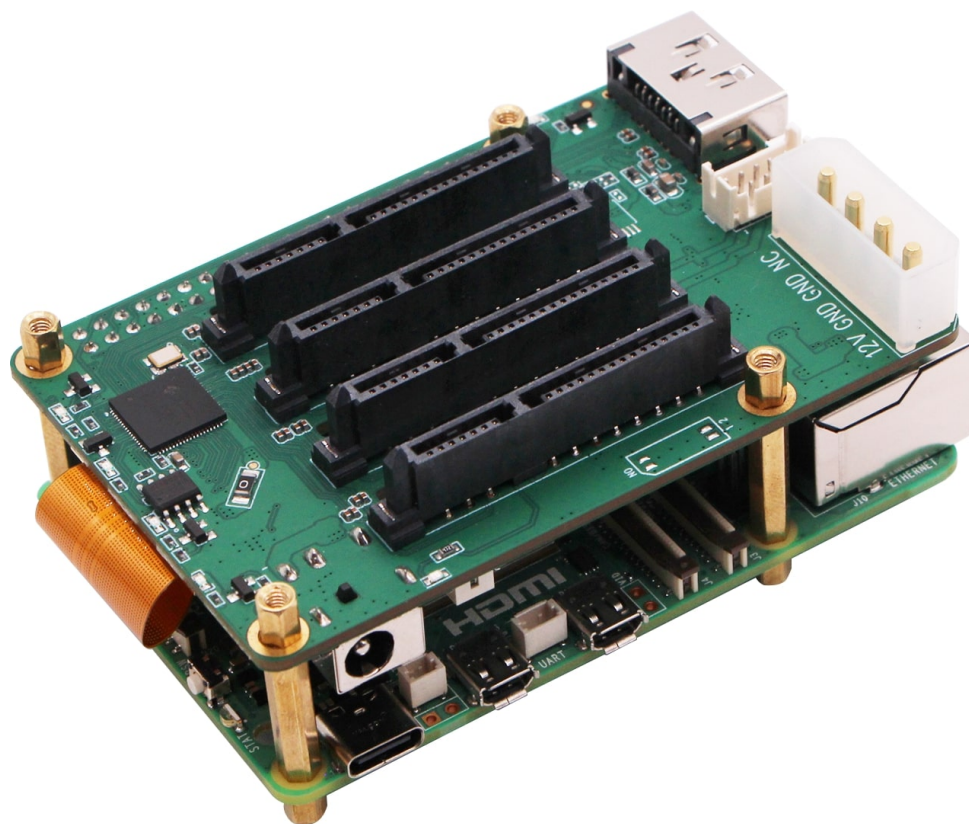
4.3 M.2 M Key to IPEX



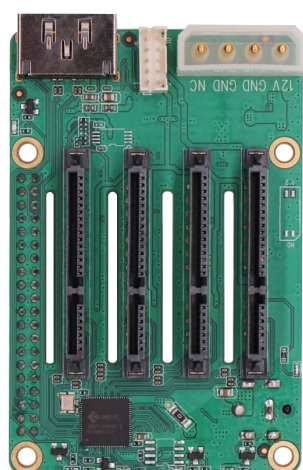
Radxa Penta SATA HAT for ROCK 3C



4.4 Raspberry Pi 5



Radxa Penta SATA HAT for Raspberry Pi 5



Penta SATA HAT



FPC Cable

copper post



M2.5*5 M2.5*18+6 M2.5*5+5



eSATA Cable



Acrylic Board

5 Availability

Radxa guarantees availability of the Radxa PENTA SATA HAT until at least September 2029.

6 Support

For support, please see the support documentation section of the [Radxa website](#) website and post questions on the [Radxa Forum](#).