



# RZ Ecosystem Partner Solution Banana Pi High-Performance SOM



## Solution Summary

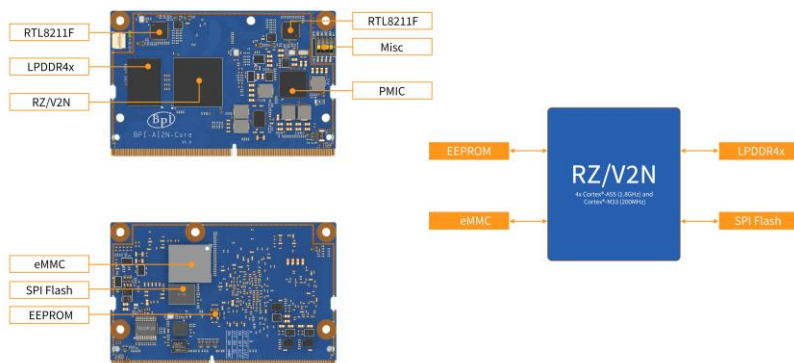
The Banana Pi BPI-AI2N SOM module and BPI-AI2N Carrier are open-source hardware solutions designed to leverage the powerful capabilities of the [RZ/V2N](#) Vision AI MPU. The BPI-AI2N platform supports developers with a flexible, community-driven ecosystem, enabling faster innovation and application development. The BPI-AI2N is powered by the RZ/V2N MPU, delivering industry-leading AI acceleration at 15TOPS (Sparse) and high-performance computing (4x Cortex®-A55 processors). This makes the BPI-AI2N ideal for developing cutting-edge vision AI solutions.

## Features/Benefits

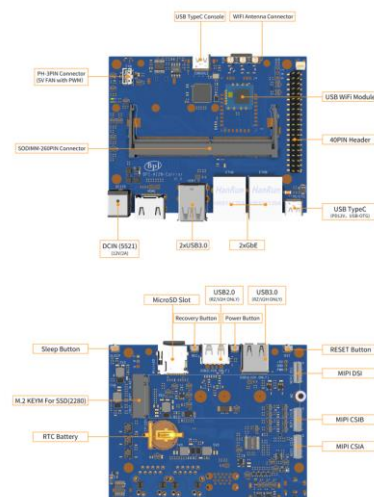
- Small Form Factor: Compact SO-DIMM 260PINs design (SOM module size: 45x69.6mm)
- Open-source development kit, including SOM, BPI-AI2N Carrier board and a rich ecosystem of tools and support from the Banana Pi developer community
- Customizable hardware & software by OEM&ODM
- Yocto and other open-source software support
- Memory & storage: 8GB LPDDR4x, 32GB eMMC, 64MB QSPI Flash
- Wide operating temperature range from -40°C to 85°C

## Diagrams/Graphics

BPI-AI2N



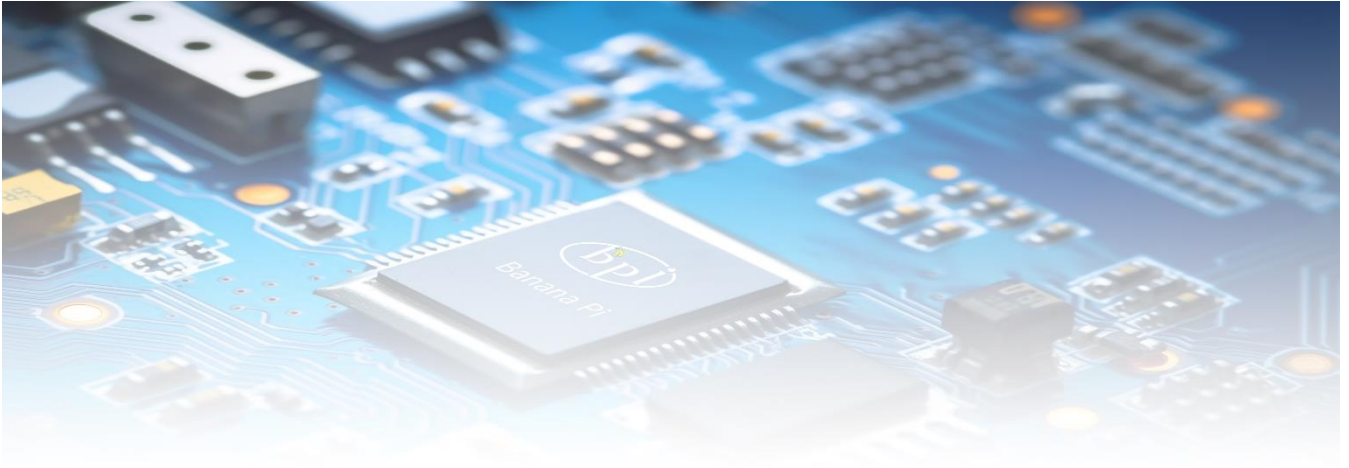
BPI-AI2N Carrier board



## Target Markets and Applications

- Robotics and drones
- Smart retail
- Industrial applications
- IoT applications
- Medical
- Smart city/home

[www.docs.banana-pi.org/en/BPI-AI2N/BananaPi\\_BPI-AI2N](http://www.docs.banana-pi.org/en/BPI-AI2N/BananaPi_BPI-AI2N)



## About us

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Banana Pi, established in 2004, is a leading provider of open-source development boards and solutions.

With offices in Dongguan and Shenzhen, we combine strong hardware and software R&D teams to deliver innovative, high-performance platforms.

Our products are manufactured in our own factories, ensuring quality and reliability.

Backed by a vibrant global open-source community, Banana Pi supports developers and enterprises in creating cutting-edge solutions for AI, IoT, robotics, and more.

For more details, visit [www.banana-pi.org](http://www.banana-pi.org).

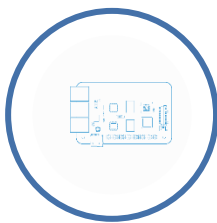
Contact us: [www.banana-pi.org/en/contact-us/](http://www.banana-pi.org/en/contact-us/)

BPI-AI2N Carrier: [www.docs.banana-pi.org/en/BPI-AI2N-Carrier/BananaPi\\_BPI-AI2N-Carrier](http://www.docs.banana-pi.org/en/BPI-AI2N-Carrier/BananaPi_BPI-AI2N-Carrier)

## Our Service

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Retail, Bulk, ODM, OEM



**Hardware design**



**Software  
developing**



**Whole Product  
Manufacturing**



**Regular boards  
sales**

## Main product lines

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Single Board Computer

Smart Router board

Compute Module and Development Kit

STEAM Educational products