

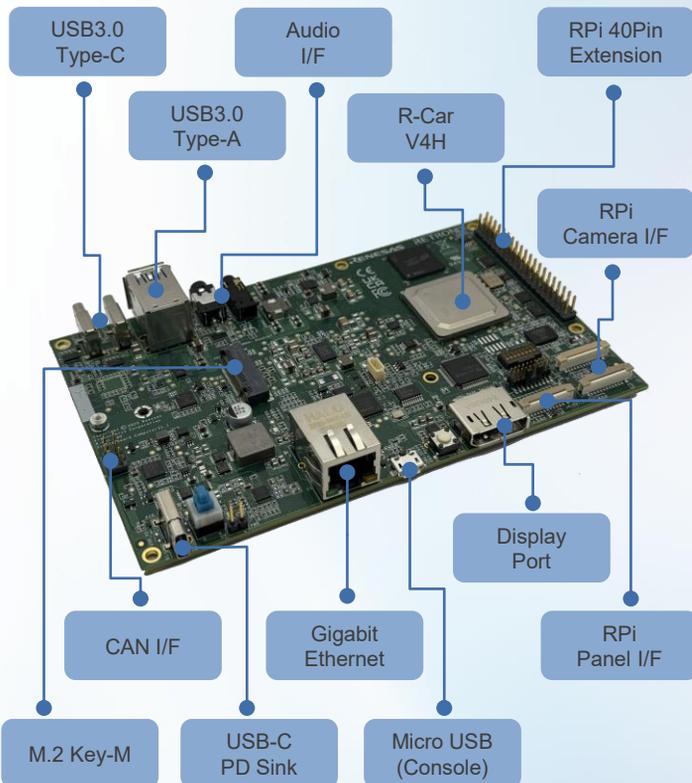
Integrated development environment for AI services and low-cost compact board

# R-Car V4H Sparrow Hawk

## Core benefits

- **Ready to run OSS based software and start development**
  - Get started instantly with OSS based SW supporting Yocto & Debian, available FoC (Free Of Charge) with just Click though agreement
- **Unleash 30TOPS AI power in a compact board design**
  - Experience up to 30 TOPS range AI performance on a compact board (146 × 90 mm) and fully compatible with Raspberry Pi HAT.
- **Affordable and accessible hardware for everyone**
  - Low-cost board available through global distributors and High-volume production ensuring stable supply and large inventory

## HW Features



## SW Features

Supported
Not supported yet

Debian 13 	Yocto v5.0 	 Zephyr (Dom0)	 Linux (DomD/U)	 Android (DomA)
Linux 6.12 		Xen Hypervisor 		
u-boot 2026.01 				

Board variants	Basic Kit		Complete Kit	
	8G	16G	8G	16G
Sparrow Hawk	✓	✓	✓	✓
Argon FAN			✓	✓
Micro USB cable			✓	✓
32GB Micro SD card			✓	✓

HW Features	
CPU	4x Arm® Cortex®-A76 (81K DMIPS) 3x Arm® Cortex®-R52 (25K DMIPS)
CNN-IP	30 TOPS DENSE
GPU	IMG A-Series AXM-8-256 (150 GFLOPS)
DRAM	LPDDR5 6400Mbps 8GB / 5500Mbps 16GB
Flash Memory	64MB QSPI
Camera I/F	2x Raspberry Pi Camera
Display	1x DP, 1x DSI
Ethernet AVB	1 Port (1Gbps)
Debug Serial	2 Port
Audio	In/Out, In
PCIe	1x M.2 Key-M (x2 lane)
USB3.0	2x USB type-A, 2x USB type-C
CAN-FD	2 Port
Removal Media	1x MicroSD
Extensions	Raspberry Pi 40-Pin CN
Power	USB PD 20V

SW Features	
Yocto BSP	Yocto Project 5.0.xx
Debian based BSP	Debian 13
Linux kernel	V6.12.xx
u-boot	2026.01
Trusted Firmware-A	V2.14.0

Please see the details here :

<https://rcar-community.github.io/Sparrow-Hawk/>

- Board / SW info
- Getting started
- Get the board



Please see the details here :

[https://www.retronix.com.tw/en/product\\_sbc.html](https://www.retronix.com.tw/en/product_sbc.html)

- Web page of Retronix Technology Inc.
- Board info
- Board UM



Where to buy :

<http://www.shimafuji.co.jp/en/products/2207>

- Web page of Shimafuji Electric Incorporated
- Contact : [info@shimafuji.co.jp](mailto:info@shimafuji.co.jp)



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**RENESAS**