創造と挑戦

HAGIWARA

Innovate to a compact development env
～ More useful, more customer benefit ～

HIYOKO

R-Car S4 StarterKit
(HIYOKO)

Development environment

for Mobility application developers

Good usability

- ・ **Operation confirmed with Ubuntu 20.04 LTS**
- ・ **Compatible with many dev languages**
- ・ **JTAG debugger is unnecessary**
- ・ **Power supply can be remotely controlled**
- ・ **Selectable UFS size from none/128G/256G**

Ubuntu

Vehicle-aware interfaces

- ・ **Equipped with vehicle interfaces**
   （TC10 1000BASE-T1, CAN-FD）
- ・ **Operates at DC12V only （AC adapter included）**

The size is A6

Excellent scalability

- ・ **Equipped with 1000BASE-T and USB3.0**
- ・ **Equipped with PCIe slots**
- ・ **Raspberry Pi Extension Board can be connected**
- ・ **Board to Board Connector can be used to extend functionality**

Please contact us for details

Engineering Solution Division
Hagiwara Electronics Co., Ltd.
Tel : (+81)52-931-3543
E-mail : support_heaptech@hagiwara.co.jp
PIC : NOGUCHI and TSUJI

## HAGIWARA ELECTRONICS CO., LTD.

Use Case

Easy development at the desk

Operation confirmed with Ubuntu 20.04 LTS.
So you can easily develop and run a variety of applications using OSS. The small board allows you to work on your desk, making it a great introduction to Mobility application development.

Practical development in vehicles

By connecting to the ECU using the vehicle interface, users can develop integrated into the vehicle. Ideal for more practical vehicle application development using various ECU data such as IVI/Powertrain/Body.
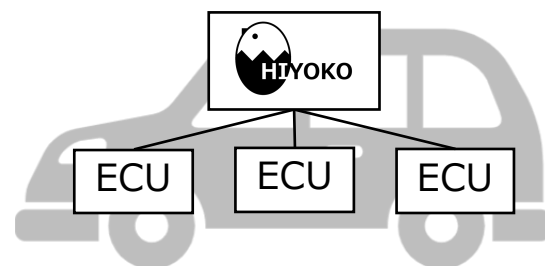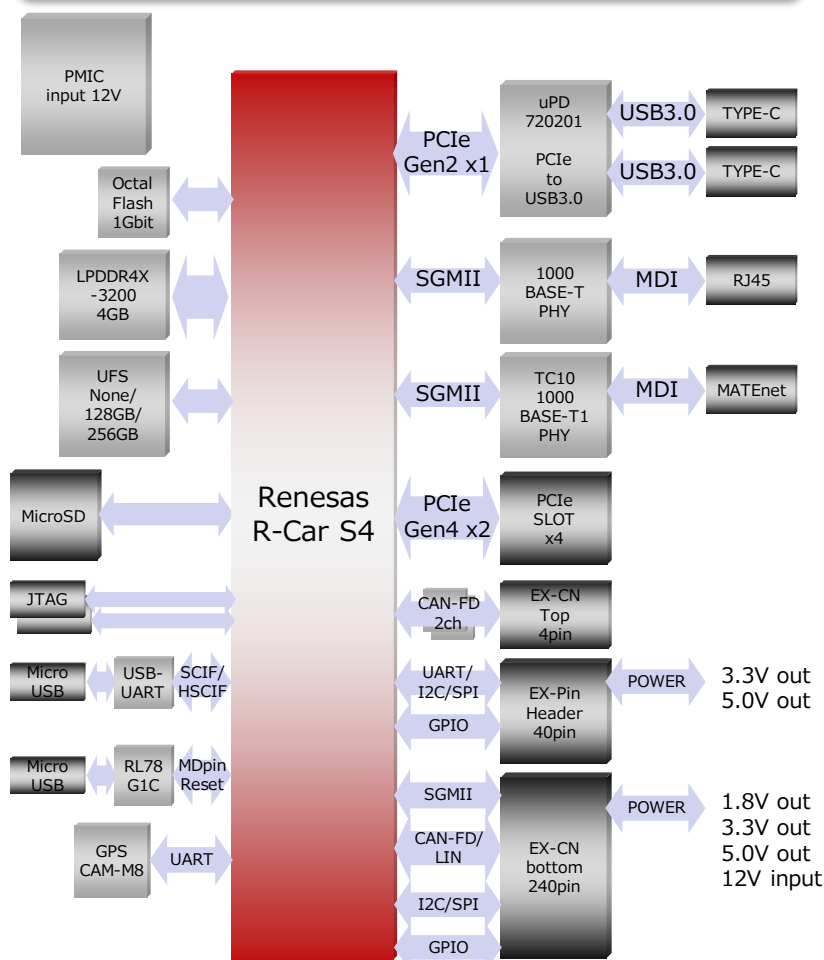
Specification

Category	Function
SoC	R-Car S4-8
FLASH	Octal-FLASH（1Gbit）
DRAM	LPDDR4X-3200（4GB）
Storage	UFS（None/128GB/256GB）
	MicroSD
Communication	USB3.0 x2（PCIe Gen2 1lane）
	1000BASE-T x1
	1000BASE-T1 x1 （TC10 support）
	PCIe Gen4 2lanes
EX-Connector	CAN-FD x2
EX-Pin Header	UART x1, I2C x2, SPI x2, GPIO x17
EX-Connector (bottom)	SGMII x1, CAN-FD x8[*1], LIN x1[*1*2], I2C x1, SPI x3, GPIO x10
Debug	USB-UART x1, JTAG x2
Status Control	RL78/G1C（USB I/F）
Location Information	On-Board GPS Module
Input Power	DC +12V
Dimensions	148mm x 105mm

*1 The product does not include a transceiver. *2 The product does not include a device driver.

Block Diagram

HAGIWARA ELECTRONICS CO., LTD.