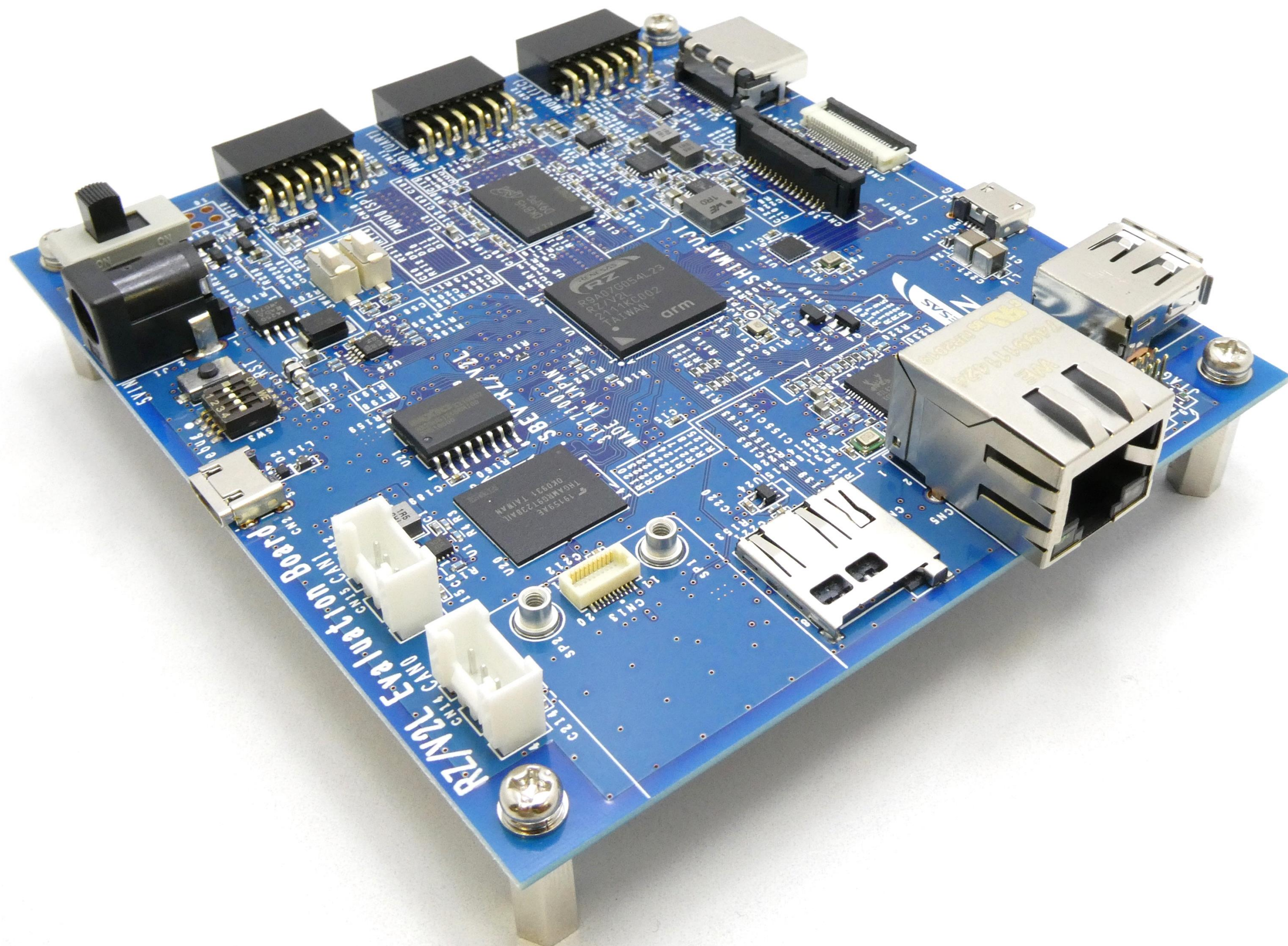



SBEV-RZ/V2L (RZ/V2L Evaluation Board)

SHIMAFUJI




**AI Accelerator
DRP-AI**

- Realizes AI inference with high power efficiency without costly heat dissipation like heat sink




**ISP function by DRP library
Simple ISP**

- Improves recognition accuracy by image pre-processing
- Makes using low-cost CMOS sensor without ISP possible




**Compatibility of RZ/V2L & RZ/G2L
Scalability for Vision AI**

- Provides easy migration from RZ/G2L to RZ/V2L by package full compatibility and S/W reusability



**Embedded AI on various use cases
Target Application**

- Home appliances with AI
- Surveillance camera with recognition function
- Retail POS
- Smart doorbell etc.

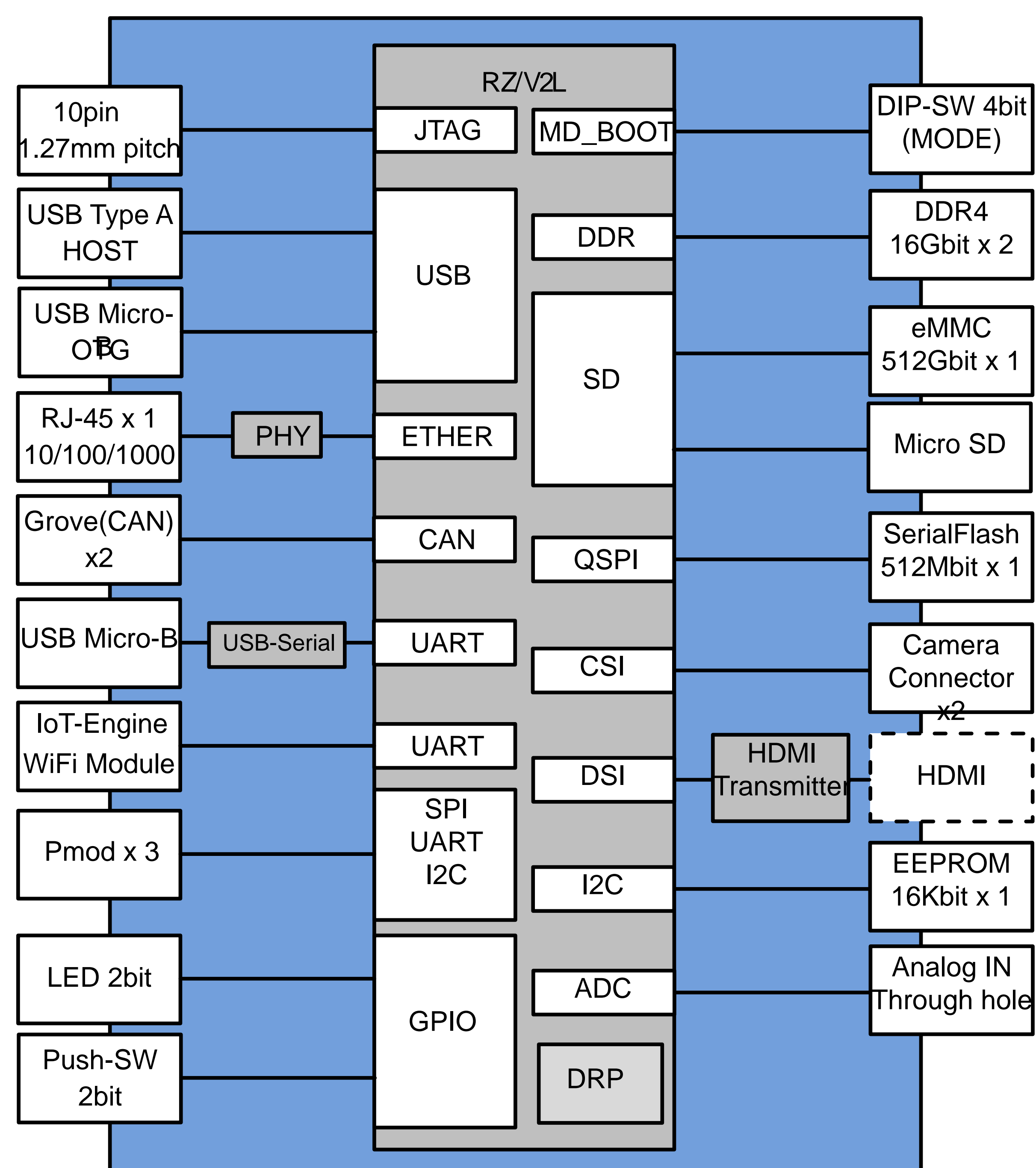


The SBEV-RZ/V2L is an evaluation board equipped with Renesas' RZ/V2L microcontroller (R9A07G054L23GBG). It features MIPI camera input, USB, ETHER, SD, and AI accelerator for vision (DRP-AI) to evaluate RZ/V2L for a variety of applications, including image processing.

◆ SBEV-RZ/V2L microcomputer

System	CPU	Interfaces
Arm Debugger (CoreSight)	ARM Cortex™-A55 1.2GHz	1 x DDR3L/DDR4-1600 16bit (In line ECC)
Arm TrustZone	ARM Cortex™-A55 1.2GHz	1 x SPI Multi I/O (8bit DDR)
16 x DMAC	NEON VFP	1 x SDHI(UHS-I)/MMC
Interrupt Controller	L1 IS : 32KB w/Parity	1 x SDHI(UHS-I)
PLL/SSCG	L1 DS : 32KB w/ECC	1 x USB2.0 Host
Standby (Sleep/Software/Module)	L2\$: 0KB	1 x USB2.0 Host / Function
	L3\$: 256KB w/ECC	2 x 100/1000Mbps Ether MAC
		4 x I2C
		2 x SCI 8/9bit
		5 x SCIF(UART)
		3 x RSPI
		2 x CAN
		GPIO
		Analog
		8 x 12bit ADC

◆ Block Diagram



◆ SBEV-RZ/V2L Specifications

RZ/V2L (R9A07G054L23GBG)	
CPU	AI Accelerator; DRP-AI 2x Cortex-A55(1.2GHz), Cortex-M33(200MHz) Simple ISP(provided in the DRP library)
Memory	DDR 4GB Serial Flash Memory 64MB eMMC 64GB EEP ROM 2kB
External	USB Type A (HOST) x1 USB Micro B (OTG) x1 USB Micro B (USB-Serial) x1 CAN x2 CSI x2 Ether x1 Micro SD Card Slot x1 JTAG (Half pitch 10pin) x1
Evaluation components	LED x2 Push-SW x2
Power	DC 5V DC Jack
Board Size	100mm x 110mm (excluding protrusions)

SP32EB001E

The contents of this material might change without notification.

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