

SOM RENESAS RZ/V2L - AI Accelerator

2 x Arm Cortex-A55, 1 x Cortex-M33, 1.2 GHz



- Dual core Arm Cortex A55, 1.2GHz + Cortex M33
- Build-in DRP-AI accelerator (0.8 TOPS)
- Built-in Trust Platform Module 2.0
- -40 to +85 C industrial temperature rating
- 50mm x 50mm Solder-Down form factor
- Short lead time with a stable supply chain
- Included OneKi AI SDK (Full version) : support Python/C++ languages, Optimized for model Tiny-YOLOv7



		RZ/V2L
CPU Details	CPU Name	Renesas RZ/V2L
	CPU Type	2 x Cortex A55 1 x Cortex M33 DRP-AI accelerator
	CPU Speed	1.2 GHz
System	RAM	2GB DDR4 default, optional: 4GB DDR4
	Internal Storage	16GB eMMC default, optional: up to 64GB eMMC
	External Storage Support	SD USB 2.0
Multimedia	GPU	Arm Mali-G31- 500 MHz
	3D GPU Support	OpenGL Supported OpenCL 2.0 Full Profile Supported
	AI Accelerator	DRP-AI
	Video Decoder	H.264 1920x1080 @30 fps
	Video Encoder	H.264 1920x1080 @30 fps
	Display Interfaces	1 x MIPI-DSI, RGB
Connectivity	Camera Interface	1 x MIPI-CSI, support 5MP, 30 fps
	USB 2.0	2
	I2C	3
	SPI	2
	UART	3
	GPIO	✓

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	PWM	✓
	CAN	2
	SD/MMC	Up to 2
	JTAG	Test point header
OS Support	Embedded Linux	Yocto Linux Debian
Physical	Size	50 x 50 mm
	Interface	LGA Solderble
Power	Main Voltage	5V
	I/O Voltage	3.3V
Environment	Temperature	Industrial: -40°C to 85°C
	Humidity	Humidity (Non-condensing): 10% - 90%

