RZ Ecosystem Partner Solution

MXT RZ/V2L and RZ/G2L SMARC SoM
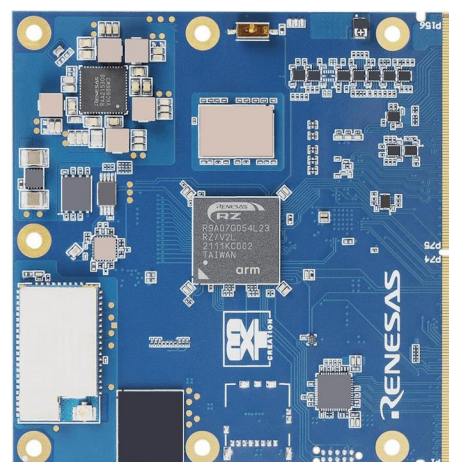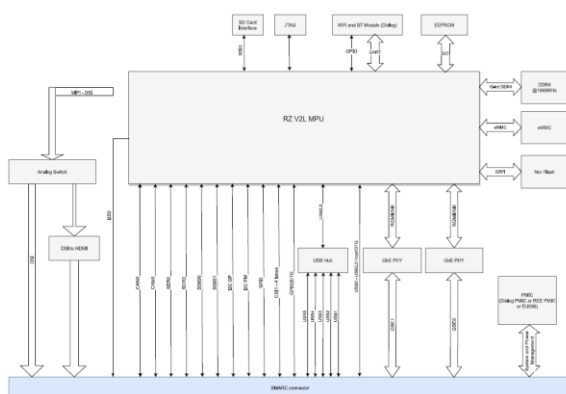
Solution Summary

The SMARC SoM built around the RZ/V2L or RZ/G2L microprocessor unit (MPU) offers an outstanding solution tailored for both consumer electronics and industrial equipment. Featuring the powerful RZ/V2L DRP-AI accelerator, it delivers real-time AI inference alongside critical image-processing capabilities such as color correction and noise reduction. This smart integration enables developers to deploy AI-based vision applications without relying on an external image signal processor (ISP). The RZ/G2L is offering customers additional flexibility in selecting the processing platform that best matches their performance, power, and cost requirements. Ideal for entry-level industrial human-machine interfaces (HMIs) and applications such as embedded devices with video capabilities.

Features/Benefits

- 2 x Arm Cortex-A55 @1.2GHz, 1x Arm Cortex-M33
- Form factor : 85x50mm
- DRP-AI for AI accelerator(RZ/V2L)
- 3D graphics engine for Arm Mali-G31
- Video codec H. 264 Enc/Dec
- MIPI-CSI for camera input, MIPI-DSI for display
- 2 x Gigabit Ethernet, USB 2.0, SD interface
- 2GB DDR4, 32GB eMMC, microSD, 16MB QSPI
- OS support: embedded Linux with yocto-based BSP enables customization

Block Diagram/Graphics

Target Market and Applications

- Camera-based AI vision
- Smart appliances (Home assistants, intelligent displays)
- Retail analytics

- Industrial vision systems
- Office automation
- Medical-grade consumer electronics

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Get the Board

To obtain the RZ/V2L System-on-Module or a compatible carrier board, contact MXT to request samples, discuss customization options, or place an order. Boards can be tailored to specific project needs and ordered at scale.

Address	400083, Avram Iancu, No. 32A, Cluj-Napoca, Romania
Email	info@mxt.ro
Contact	+40 742 063 131

MXT offers direct support for customer-specific builds and consultation, ensuring flexibility for prototyping and scalable deployment.

About Us

MXT is an Independent Design house focused on providing full-stack solutions for embedded products. Based out of Romania, MXT's mission is for integrating multiple technologies – embedding anything- with a people-oriented focus on high performance delivery.

Always providing a tailored market approach, MXT assists you during the entire development cycle, form the concept phase design, up to production. Combining a strong technical background in electronics and information technology with hands-on experience in complex projects, we are able to handle your requirements and challenges, offering you the optimal solution for your project.

Services

1.	2.	3.	4.
Software services	**Hardware services**	**PoC & prototyping**	**Technical trainings**
Embedded solutions & design	SOM Design	Schematic and layout design	On request, for embedded related area
Linux customization	ARM based embedded boards	PCB & PCBA	
Real Time OS	Motor control	Customized software applications	
Board support packages	Schematic design	R&D activities	
Customized software applications	PCB layout design		
Basic software development (AUTOSAR 4.x)	High speed design		
Flash bootloaders	Low power design		
FPGA programming	Hardware laboratory		
HMI design and implementation			

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