RZ/G2L

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General-Purpose MPU with Dual-Core Arm Cortex-A55 CPUs and Single-Core Cortex-M33 CPU with 3D Graphics and Video Codec Engine

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Overview

Description | Features | Comparison | Applications



The RZ/G2L microprocessor includes a Cortex®-A55 (1.2GHz) CPU, 16-bit DDR3L/DDR4 interface, 3D graphics engine with Arm® Mali-G31 and video codec (H.264). It also has many interfaces such as camera input, display output, USB 2.0, and Gbit Ethernet, making it ideal for applications such as entry-class industrial human-machine interfaces (HMIs) and embedded devices with video capabilities.

The RZ/G2L is also package-compatible and pin-compatible with the RZ/G2L embedded with AI accelerator.

This allows RZ/G2L users to easily upgrade to the RZ/V2L for additional AI functions without needing to modify the PCB, keeping integration costs low.

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★ Flyer	RZ/G2L, RZ/G2LC, RZ/G2UL Flyer PDF 4.08 MB 日本語	Jul 18, 2024
Application Note	Mount Conditions Baking Conditions PDF 157 KB	Jun 5, 2024
Guide	SMARC EVK of RZ/G2L, RZ/G2LC, RZ/G2UL Linux Start-up Guide Rev.1.03 PDF 3.16 MB	May 31, 2024
Application Note	RZ/G2L PCB verification guide for DDR4/DDR3L ZIP 237.21 MB	May 20, 2024
Brochure	RZ Family Brochure PDF 11.97 MB 日本語	May 20, 2024
Manual - Software	RZ/G2L,Flex,VLP, Group BSP Manual Set (RTK0EF0045Z90006AJ-v3.0.6.zip) Log in to Download ZIP 10.89 MB	May 20, 2024
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RZ MPU Graphics Library Evaluation Version for RZ/G2L and RZ/G2LC RZ MPU Graphics Library for RZ/G2L and RZ/G2LC. You can use the graphics function on them by building according to the integration guide which is enclosed in the download file.	Software Package	Renesas
RZ/G Multi-OS Package RZ/G Multi-OS Package is the software package consisting of Firedrive Software Package (PSP) as software package for Renesas MCU with Arm® Cortex-M Core and OpenAMP as standardization API framework for interprocessor communication for developing multi OS solution. Downloads Getting Started with Flexible Software Package Setting uITRON Flexible Software Package RZ/G Multi-OS Package V2.0.2 RZG_FSP_Packs_v2.0.1	Software Package	Renesas
RZ MPU Video Codec Library Evaluation Version for RZ/G2L This product provides the RZ MPU Video Codec Library for the RZ/G2L. You can use the decoder/encoder on them by building according to the integration guide which is enclosed in the download file.	Software Package	Renesas
RZ/G Verified Linux Package [5.10-CIP]		

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Software & Tools - Other	HTML5/Chromium109) packages V1.0.0 for RZ/G Verified Linux Package V3.0.6 (RTK0EF0152000002_v1.0.0.zip) ZIP 614 KB	May 27, 2024

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Part Number, 145BG

Part Count: 2

- (16) Active
- (5) Obsolete / NRND / LTB

Part Number	Main CPU	Operating Freq.(Max) (MHz)	Sub CPU	RAM (KB)	Lead Co
	Cortex-A55	1.2GHz	Cortex-M33	512	436
	Cortex-A55x2	1.2GHz		1024	661
R9A07G044L13GBG#AC0	Cortex-A55	1200	Cortex-M33	128	45
R9A07G044L13GBG#KC0	Cortex-A55	1200	Cortex-M33	128	45

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RZ/G FOSS AI Shopping Basket Demo

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Solution for BOM Cost Reduction of the RZ/G2L MPU	Blog Post	Nov 19, 2021
Faster Evaluation Process with Unified and Scalable SMARC EVK Platform (Evaluation Board Kit Platform)	Blog Post	Oct 20, 2021

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