

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

RZ/G2L Group, RZ/G2LC Group User's Manual: Hardware

RZ/G2L, RZ/G2LC Easy Download Guide

RZ/G2L, RZ/G2LC, RZ/G2UL Flyer

OverviewDocumentationDesign & DevelopmentProduct OptionsSupportVideos & Training

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Overview

DescriptionFeaturesComparisonApplications

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-Ether, making it ideal for applications such as entry-class industrial human-machine interfaces (HMI) and embedded devices with video capabilities.

The RZ/G2L is also package-compatible and pin-compatible with the RZ/V2L 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 migration costs low.

Read More

RZ/G2L Block Diagram

System

Core

Interface

Documentation

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★ Guide

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★ Flyer

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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

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Manual - Software

RZ/G2L, Five.V2L Group BSP Manual Set (RTK0EF0045Z9000AZJ-v3.0.6.zip)

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ZMOD4xxx Sample application - Sample Code

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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 Flexible Software Package (FSP) as software package for Renesas MCU with Arm® Cortex-M Core and OpenAMP as standardization API of framework for interprocessor communication for developing multi OS solution.

Software Package

Renesas

Downloads

Getting Started with Flexible Software Package

Setting GPIO with Flexible Software Package

RZ/G Multi-OS Package V2.0.2

RZG_FSP_Packs_v2.0.1

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 Downloads

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Open source packages(oss_pkg_rzg_v3.0.6-update2.7z)

7Z 2,177.94 MB

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Software & Tools - Other

RZ/G Verified Linux Package v3.0.6-update2(RTK0EF0045Z0021AZJ-v3.0.6-update2.zip)

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Software & Tools - Other

HTML5 (Gecko102.15) packages V2.1.1 for RZ/G Verified Linux Package V3.0.6 (RTK0EF0045Z40001ZJ_v2.1.1.zip)

ZIP 1.05 MB

Jun 15, 2024

Software & Tools - Other

Open source packages for HTML5 (oss_pkg_gecko102.15_v2.1.1_forVLPV3.0.6.7z)

7Z 6,875.91 MB

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Software & Tools - Other

RZ/G Verified Linux Package v3.0.6-update1(RTK0EF0045Z0021AZJ-v3.0.6-update1.zip)

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Open source packages for Chromium (oss_pkg_chromium109_v1.0.0.7z)

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Software & Tools -

HTML5(Chromium109) packages V1.0.0 for RZ/G Verified Linux Package V3.0.6 (RTK0EF0193Z00000ZJ_v1.0.0.zip)

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Tips

R9A07G044L23GBG

Part Count: 2

(16) Active

(0) Obsolete / NRND / LTB

Part Number

OR

R9A07G044L23GBG#BC0

R9A07G044L23GBG#AC0

Main CPU

Operating Freq (Max) (MHz)

Bit Size

Sub CPU

RAM (KB)

Lead Co

Cortex-A55

Cortex-A55 x 2

≤ 1200

≤ 64

Cortex-M33

≤ 128

456

55+

≥ 1200

≥ 64

≥ 128

Cortex-A55 x 2

1200

64

Cortex-M33

128

45

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Introduction of RZ/G AI BSP

Human-machine Interface with Arm®-based Edge AI

RZ/G FOSS AI Shopping Basket Demo

CIP Real-Time Kernel Demo on

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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