RZ/G2L, G2LC, G2UL, G3S, G3E

Release Note for RZ/G Multi-OS Package V3.0.0

Introduction

This is the release note for RZ/G Multi-OS Package v3.0.0

Contents

1. Overview

This release note describes what's additionally supported, improvements and bug fixes in RZ/G Multi-OS Package v3.0.0.

2. Proven Environment

Dependent tools and software	Detail
Integrated Development Environment (IDE)	e² studio 2025-07
GCC cross-toolchain	Arm GNU Toolchain : 13.3.1.arm-13-24
Segger J-Link Software	V7.96j
RZ/G Verified Linux Package	RZ/G Verified Linux Package v3.0.7 RZ/G Verified Linux Package v4.0.0 (Note)
RZ/G3E Linux BSP	RZ/G3E Linux BSP v1.0.0
Flexible Software Package (FSP)	RZ/G FSP v3.1.0

Note: This package checks the behavior on RZ/G2L and RZ/G2LC with this Verified Linux Package only.

3. Supported RZ/G MPU Kits

RZ/G Multi-OS Package v3.0.0 works with the kits listed below:

- RZ/G2L Evaluation Board Kit
- RZ/G2LC Evaluation Board Kit
- RZ/G2UL Evaluation Board Kit
- RZ/G3S Evaluation Board Kit
- RZ/G3E Evaluation Board Kit

4. New Features

- New support for development kits: RZ/G3E Evaluation Board Kit.
- New support for RZ/G Verified Linux Package V3.0.7 and V4.0.0.

5. Fixes and Improvements

- Updated the postbuild.sh script included in the RPMsg Demo Projects to remove unnecessary sections from binary files in the build artifacts. This update addresses the issue where the demo could not be launched from BL2 of TrustedFirmware-A on the RZ/G3S.

6. Known Issues

None.

7. Deprecations

None.

8. Third Party Software

- OpenAMP: v2018.10

Revision History

Rev.	Date	Description	
		Page	Summary
1.00	Jul.30.21	-	First edition issued.
1.01	Nov.30.21	-	Updated to align with RZ/G2L BSP V1.3.
1.02	Jan.21.21	-	Updated to align with RZ/G2L BSP V1.3 update2.
1.10	Apr.27.22	-	Updated to align with RZ/G2L BSP V1.4.
1.11	May.30.22	-	Updated to align with RZ/G2 Verified Linux Package Version 3.0.0
1.12	Aug.31.22	-	Updated to align with RZ/G2 Verified Linux Package Version 3.0.0-update2
1.20	Nov.30.22	-	Updated to align with RZ/G2 Verified Linux Package Version 3.0.1
1.21	Apr.24.23	-	Updated to align with RZ/G2 Verified Linux Package Version 3.0.3
1.22	Oct 31.23	-	Updated to align with RZ/G2 Verified Linux Package Version 3.0.5
2.00	Jan.09.24	1, 3, 5-8, 11, 12, 14	Added RZ/G3S related description.
		13	CA55 console log stated in 4.6 was updated in accordance with the updates in latest RPMsg sample application.
2.01	Feb.13.24	-	Updated to align with RZ/G FSP Version 2.0.1.
		12	Fixed the address to write firmware to Flash ROM/eMMC.
2.0.2	Apr.24.24	-	Updated to align with RZ/G Verified Linux Package Version 3.0.6.
2.1.0	Aug.30.24	5-7	Added 3.5.2 in accordance with CM33 cold boot support.
		9-14	Added the procedure specific to CM33 cold boot support.
		18-19	Added 4.4.3 in accordance with Remoteproc support.
2.2.0	Oct.31.24	18	Added 4.4.4 in accordance with Remote support for RZ/G3S.
		21-22	Added 4.5.2 in accordance with the procedure specific to CA55 invocation for RZ/G3S.
2.3.0	Apr.25.25	-	Added AWO example project and update the package version to 2.3.0. For more information about the AWO example project, please refer to the included documentation.
3.0.0	Jul.22.25	-	Added RZ/G3E related description.
			Updated to align with RZ/G Verified Linux Package Version 3.0.7 and 4.0.0.
			Updated to align with RZ/G FSP Version 3.1.0.
			Moved the setup instructions to the Quick Start Guide and removed the chapter.

General Precautions in the Handling of Microprocessing Unit and Microcontroller Unit Products

The following usage notes are applicable to all Microprocessing unit and Microcontroller unit products from Renesas. For detailed usage notes on the products covered by this document, refer to the relevant sections of the document as well as any technical updates that have been issued for the products.

1. Precaution against Electrostatic Discharge (ESD)

   A strong electrical field, when exposed to a CMOS device, can cause destruction of the gate oxide and ultimately degrade the device operation. Steps must be taken to stop the generation of static electricity as much as possible, and quickly dissipate it when it occurs. Environmental control must be adequate. When it is dry, a humidifier should be used. This is recommended to avoid using insulators that can easily build up static electricity. Semiconductor devices must be stored and transported in an anti-static container, static shielding bag or conductive material. All test and measurement tools including work benches and floors must be grounded. The operator must also be grounded using a wrist strap. Semiconductor devices must not be touched with bare hands. Similar precautions must be taken for printed circuit boards with mounted semiconductor devices.
2. Processing at power-on

   The state of the product is undefined at the time when power is supplied. The states of internal circuits in the LSI are indeterminate and the states of register settings and pins are undefined at the time when power is supplied. In a finished product where the reset signal is applied to the external reset pin, the states of pins are not guaranteed from the time when power is supplied until the reset process is completed. In a similar way, the states of pins in a product that is reset by an on-chip power-on reset function are not guaranteed from the time when power is supplied until the power reaches the level at which resetting is specified.
3. Input of signal during power-off state

   Do not input signals or an I/O pull-up power supply while the device is powered off. The current injection that results from input of such a signal or I/O pull-up power supply may cause malfunction and the abnormal current that passes in the device at this time may cause degradation of internal elements. Follow the guideline for input signal during power-off state as described in your product documentation.
4. Handling of unused pins

   Handle unused pins in accordance with the directions given under handling of unused pins in the manual. The input pins of CMOS products are generally in the high-impedance state. In operation with an unused pin in the open-circuit state, extra electromagnetic noise is induced in the vicinity of the LSI, an associated shoot-through current flows internally, and malfunctions occur due to the false recognition of the pin state as an input signal become possible.
5. Clock signals

   After applying a reset, only release the reset line after the operating clock signal becomes stable. When switching the clock signal during program execution, wait until the target clock signal is stabilized. When the clock signal is generated with an external resonator or from an external oscillator during a reset, ensure that the reset line is only released after full stabilization of the clock signal. Additionally, when switching to a clock signal produced with an external resonator or by an external oscillator while program execution is in progress, wait until the target clock signal is stable.
6. Voltage application waveform at input pin

   Waveform distortion due to input noise or a reflected wave may cause malfunction. If the input of the CMOS device stays in the area between V_{IL} (Max.) and V_{IH} (Min.) due to noise, for example, the device may malfunction. Take care to prevent chattering noise from entering the device when the input level is fixed, and also in the transition period when the input level passes through the area between V_{IL} (Max.) and V_{IH} (Min.).
7. Prohibition of access to reserved addresses

   Access to reserved addresses is prohibited. The reserved addresses are provided for possible future expansion of functions. Do not access these addresses as the correct operation of the LSI is not guaranteed.
8. Differences between products

   Before changing from one product to another, for example to a product with a different part number, confirm that the change will not lead to problems. The characteristics of a microprocessing unit or microcontroller unit products in the same group but having a different part number might differ in terms of internal memory capacity, layout pattern, and other factors, which can affect the ranges of electrical characteristics, such as characteristic values, operating margins, immunity to noise, and amount of radiated noise. When changing to a product with a different part number, implement a system-evaluation test for the given product.

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