RZ/A1H Group, RZ/A1M Group Handbook for RZ/A1H, RZ/A1M

Introduction

This document compiles useful information for each stage of device selection, development, and Mass production. You can also select what you need for your application from our rich selection of application notes that describe how to use a peripheral function, example applications, how to create a program, and more.

Please utilize this information, materials and application notes as a handbook when developing.

Target Device

RZ/A1H Group, RZ/A1M Group

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1. The table of information and materials needed for Device Selection, Development and Mass production.

1.1 Step1: Device Selection

This section summarizes the information that is useful for the preliminary survey phase (Step1-1) and for the evaluation phase for device performance and features (Step1-2) when selecting the device.

1.1.1 Step1-1: Preliminary survey phase

#	Item	Contents	Link
1	**Hardware information**	Datasheet	Doc
2	**Products & Solutions**	RZ/A1H Group Home Page	Web site
3		RZ/A1M Group Home Page	Web site
4		RZ/A Series Flyer	Doc
5		RZ Family Brochure	Doc
6		Video	Web site
7		News & Blog	Web site
8		Renesas Wiki - RZ/A Series 32/64-bit MPUs	Web site

1.1.2 Step1-2: Evaluation phase for device performance and features

#	Item	Contents	Link
User's Manual / Documentation			
1	**Document**	User's manual: Hardware	Doc
2		RZ/A1H Group Technical update (errata information)	Web site
3		RZ/A1M Group Technical update (errata information)	Web site
4		RZ/A1H Group Product change notice (PCN)	Web site
5		RZ/A1M Group Product change notice (PCN)	Web site
6		RZ Family NOMENCLATURE (Part number guide, the meaning of character in part number)	Doc
7		Semiconductor reliability handbook	Doc
8		RoHS Note: Product Options → Part Number →Package information → RoHS Info	Web site (RZ/A1H) Web site (RZ/A1M)
9		RZ/A Start-up	Web site
Evaluation Board			
10	**Evaluation Board (for General purpose)**	RZ/A1H-Starter-Kit-Plus (Renesas Starter Kit+ for RZ/A1H)	Web site
Evaluation environment (set up method)			
11	**Hardware development**	RZ/A1H-Starter-Kit-Plus User's Manual	Doc
12		RSK+ RZA1H Design Data	Doc
13		Renesas Starter Kit+ for RZ/A1H CPU Board Schematics	Doc
14	**Software development**	Renesas Starter Kit+ for RZ/A1H Quick Start Guide	Doc
15		RZ/A1H FreeRTOS Software Package	Web site
16		RZ/A1H Software Package	Doc Sample Code
17		RZ/A1 Microsoft Azure Software Development Kit	github
18		e² studio - Information for RZ Family	Web site
19		RZ/A1H Group Examples of Peripheral Function Settings and Its Usage (Initial Settings, DMAC, I2C Bus, RSPI, SCIF, MTU2, and FLCTL)	Doc Sample Code
20		RZ/A1H Group MMU Configuration for Single-chip-microcomputer-like Operation	Doc
21		RZ/A1H Group RSCAN Driver Module	Doc Sample Code
22		RZ/A1H Group JCU and PFV Driver Example	Doc Sample Code
23		RZ/A1H Group QE for Video Display Controller 5 Sample Program	Doc Sample Code
24		QE for Camera: Development Assistance Tool for Camera Applications	Web site
25		QE for Display: Development Assistance Tool for Display Applications	Web site
26		RZ/A1H Group USB Peripheral Mass Storage Class Driver (PMSC)	Doc Sample Code
27		RZ/A1H Group USB Peripheral Human Interface Device Class Driver (PHID)	Doc Sample Code
28		RZ/A1H Group USB Host Human Interface Device Class Driver (HHID)	Doc Sample Code
29		RZ/A1H Group USB Peripheral Communications Device Class Driver (PCDC)	Doc Sample Code
30		RZ/A1H Group USB Host Communications Device Class Driver (HCDC)	Doc Sample Code
31		RZ/A1H Group USB Host Mass Storage Class Driver (HMSC)	Doc Sample Code

Training			
32	**Training information**	RZ Family Video Library	Web site
33		Software & Tool Course solution menu	Web site
34		RZ MPU Family Course	Web site*
Partner			
35	**Partner information**	Partner products (system solutions provider)	Web site
36		RZ Family Partner Ecosystem	Web site

*It requires Renesas Academy account to access the contents.

1.2 Step2: Product Design, Development

This section summarizes useful information for product design and development.

#	Item	Contents	Link
1	**Board Design**	RZ/A Series Hardware Design Guide	Doc
2		RZ/A1 Guidelines for High-Speed USB2.0 Board Design	Doc
3		RSK+RZA1H RSK TFT Application Board Application Note	Doc
4		Crystal Units vs. IC Matching Search	Web site
5		ECAD model Note: ECAD can be found by clicking on the respective part number of the product options.	Web site (RZ/A1H)
6			Web site (RZ/A1M)
7		Package information (package outline information, mount manual, etc.)	Web site
8		Circuit Diagram CAD Data for RZ/A Series (OrCAD® Version)	Doc
9		RZ/A1H Group I/O definition header file <iodefine.h>	Doc
10		RZ/A1H Group IBIS/ BSDL	Doc
11		RZ/A1M Group IBIS/ BSDL	Doc

Supportive information

Get help from our technical staff and community.

#		Link
1	FAQ (frequently asked inquiries)	Web site
2	RZ forum (community)	Web site
3	Technical support	Web site

2. Summary of information by category

This part shows the information about application notes by the category.
(Note: To access contents of sample code, My Renesas account is required.)

2.1 RZ/A1H, RZ/A1M Application note /related information

#	Title	Contents
1	RZ/A1M: Notes on RZ/A1H and RZ/A1M from a software perspective	Since RZ/A1H and RZ/A1M are pin-compatible, Renesas only provides evaluation board and software packages for RZ/A1H and not provide RZ/A1M's one. If you consider RZ/A1M, please use RZ/A1H's one.
2	RZ/A1H Group Example of Booting from Serial Flash Memory	This application note describes an example of booting from SPI/QSPI serial flash memory using the SPI multi I/O bus controller (SPIBSC).
3	RZ/A1 Framework (SDK for Camera) Release Note	This document describes the RZ/A1 Framework (SDK for Camera), which supports camera input, LCD output and related sample applications.
4	USB Driver	USB Device Class Firmware

Revision History

Rev.	Date	Description	
		Page	Summary
1.00	April,23.2026	-	First edition issued
1.01	August 20, 2026		Reviewed the URLs