

[Released on the Web]

R20TS0550EJ0100

Rev.1.00

## RZ Family RZ/A2M SDIO Wi-Fi Package V1.00

Feb. 16, 2020

## Outline

As an application product of the RZ/A2M Software Package<sup>(Note)</sup> (a software development kit for RZ/A2M), we released RZ/A2M SDIO Wi-Fi Package V1.00 (supporting Wi-Fi communication) on the Web.

Note: The RZ/A2M Software Package is a software development kit that supports various functions of the RZ/A2M group, such as DRP (Dynamically Reconfigurable Processor), camera input, LCD output, and image adjustment.

Reference URL: <https://www.renesas.com/rza2-software-development-kit-free-rtos>

This product is available free of charge.

## 1. Features

In a cloud-linked system such as cloud-type remote monitoring services, images from the camera must be streamed at a high speed. You can develop a system that satisfies this requirement effectively by using the RZ/A2M SDIO Wi-Fi Package.

This product offers the following features.

- Because a device driver and a sample application that are required to use RZ/A2M and Wi-Fi are included, you can use them as quick reference code for system development.
- As a Wi-Fi module, the SX-SDMAC module<sup>(Note)</sup> from Silex Technology, Inc., is supported.

Note: An SX-SDMAC module must be purchased separately. For how to purchase one, see "4. Operating Environment". The SX-SDMAC is an FCC/IC/CE/MIC certified module. Radio Certification may be required.

- Because RZ/A2M SDIO Wi-Fi Package V1.00 is compatible with the RZ/A2M Software Package, you can add and use the functions supported by the RZ/A2M Software Package.

## 2. System Configuration Example

Figure 1 shows a system configuration example of a sample application (included in the RZ/A2M SDIO Wi-Fi Package) which performs high-speed wireless streaming of images from a camera. Figure 2 shows the software structure of the RZ/A2M SDIO Wi-Fi Package.

You can evaluate the entire system quickly by combining the separately-sold RZ/A2M Evaluation Board Kit<sup>(Note)</sup>, SX-SDCAC-2830-SP (Wi-Fi module from Silex Technology, Inc.), and RZ/A2M SDIO Wi-Fi Package.

Note: The RZ/A2M Evaluation Board Kit is an RZ/A2M evaluation board kit having an MIPI camera module, display output board for connecting a display, and an on-chip debugging emulator.

Reference URL: <https://www.renesas.com/rz-a2m-evaluation-board-kit>

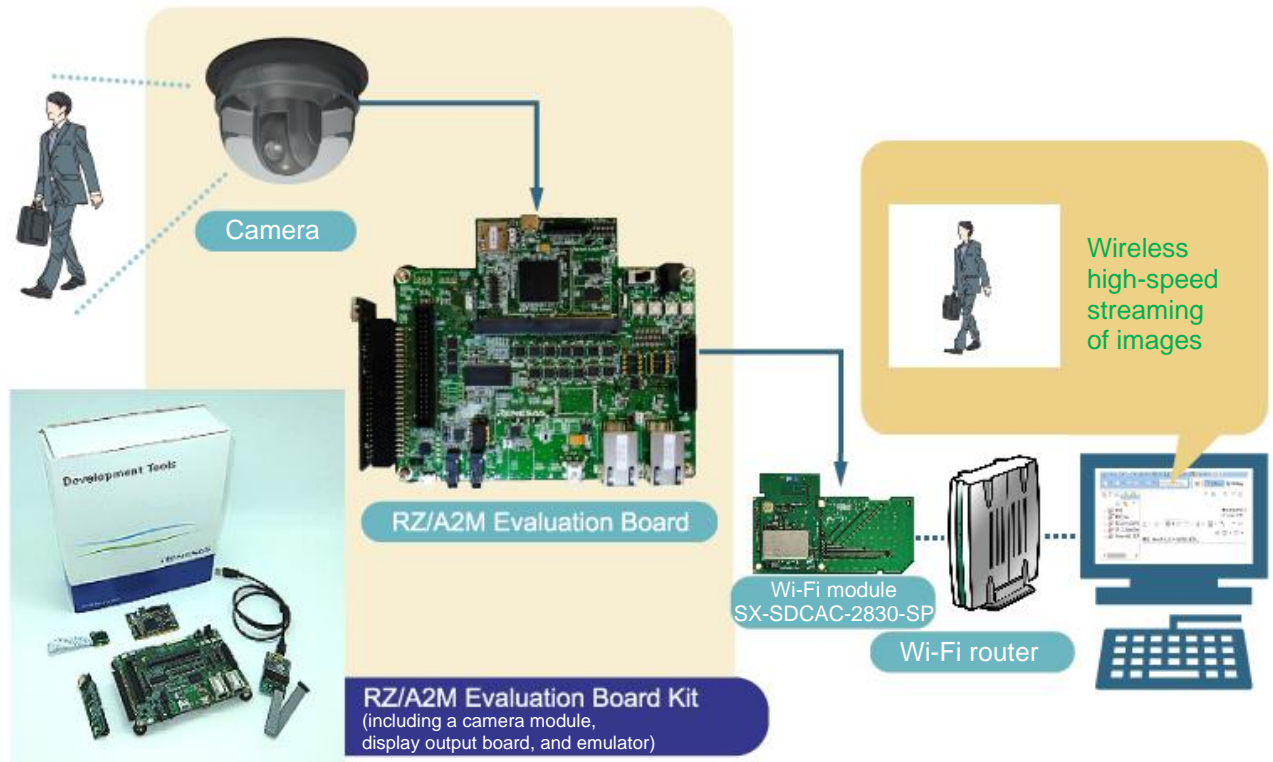


Figure 1 RZ/A2M SDIO Wi-Fi Package Sample Application

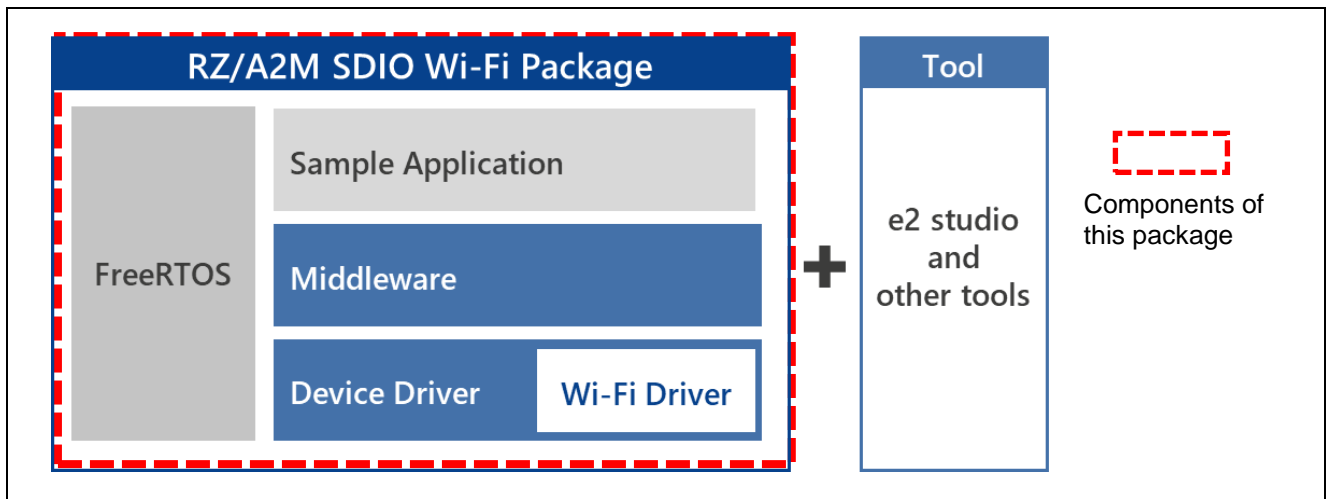


Figure 2 Software Structure of the RZ/A2M SDIO Wi-Fi Package

### 3. Supported Devices

RZ/A2M group

### 4. Operating Environment

The operating environment mainly consists of the following:

- Integrated development environment: e<sup>2</sup> studio V7.7.0 and later versions

<https://www.renesas.com/e2studio>

- Compiler: GNU Arm Embedded Toolchain (6-2017-q2)

<https://developer.arm.com/tools-and-software/open-source-software/developer-tools/gnu-toolchain/gnu-rm/downloads>

- Supported board: RZ/A2M Evaluation Board Kit

<https://www.renesas.com/rz-a2m-evaluation-board-kit>

- Emulator: SEGGER J-link LITE (included in the board above)

- Wi-Fi module: SX-SDCAC-2830-SP from Silex Technology, Inc.

<https://www.silextechnology.com/connectivity-solutions/embedded-wireless/sx-sdcac-sd-card>

Get the package from:

<https://www.arrow.com/en/products/sx-sdcac-2830-sp/silex-technology-america>

### 5. Obtaining the Program

Obtain RZ/A2M SDIO Wi-Fi Package V1.00 from the URL below.

Before use, you must agree with the "License Agreement Regarding the Wireless Driver for SX-SDMAC" and the "License Agreement Regarding the RZ/A2M SDIO Wi-Fi Package".

<https://www.renesas.com/products/software-tools/software-os-middleware-driver/software-package/rza2-software-development-kit-free-rtos/sdio-wifi.html>

### 6. Using the Product

Download the package from the URL shown in section 4. Decompress the zip file, then start building your project in e<sup>2</sup> studio. In e<sup>2</sup> studio, peripheral functions and middleware can be easily added to an existing project by using Smart Configurator.

Refer to the following user's guide for details.

RZ/A2M Smart Configurator User's Guide: e<sup>2</sup> studio

Document number: R20AN0583<sup>(Note)</sup>

Note: The last six digits are omitted.

<https://www.renesas.com/search/keyword-search.html?q=r20an0583&genre=document&redirect=true>

Revision History

Rev.	Date	Description	
		Page	Summary
1.00	Feb.16.20	-	First edition issued

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