

User Manuals

DA16200 DA16600 AWS IoT Reference

Abstract

This document contains the release notes for Renesas Electronics' DA16200 and DA16600 FreeRTOS Software with AWS IoT Reference, version 3.2.6.0.

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1 Terms and Definitions

API	Application Programming Interface
OTA	Over The Air
RTOS	Real Time Operating System
SDK	Software Development Kit
QFN	Quad Flat No-lead Package

2 Release Data

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Table 1: Information Table

Software	AWS_IOT Reference 3.2.6.0 (DA16200 and DA16600 SDK v3.2.6.0 based)
Device Number	DA16200/DA16600
Software Release Date	22 February 2023
Software Version Number	3.2.6.0
Software Release Type (Note 1)	PATCH

Note 1 Releases can be of the following types: FULL (GA), FULL (LA), ENGINEERING, PATCH or BINARY

3 License

Licenses covering this release are listed in the license.txt file in SDK docs folder.

4 Related Documentation and References

- [1] UM-WI-056, DA16xxx, FreeRTOS, Getting Started Guide, User Manual, Renesas Electronics
- [2] UM-WI-046, DA16200, FreeRTOS, Programmer Guide, User Manual, Renesas Electronics
- [3] UM-WI-042, DA16200, Provisioning the Mobile App, User Manual, Renesas Electronics
- [4] UM-WI-016, DA16200, Door Lock Application AWS IoT, User Manual, Renesas Electronics
- [5] UM-WI-017, DA16200, AWS IoT Server Setup, User Manual, Renesas Electronics
- [6] DA16200, Datasheet, Renesas Electronics

5 Release Description

5.1 Version 3.2.6.0

5.1.1 Overview

This release note is for the AWS IoT reference which is based on SDK 3.2.6.0. It provides AWS IoT support for both the DA16200 device and the DA16600 module.

The AWS IoT reference includes improvements and new features listed in [Table 2](#) and bug fixes and improvements listed in [Table 3](#). For details on all changes in the AWS SDK 3.2.6.0, please see the release notes for SDK 3.2.6.0.

5.1.2 New and Updated Features of 3.2.6.0

Table 2: 3.2.6.0 New Features

Feature Number	Description
3.2.6.0 - 01	Updated AWS embedded SDK platform from 3.1.4 to 202112.00
3.2.6.0 - 02	Support Fleet Provisioning
3.2.6.0 - 03	AWS Qualified

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5.1.3 Fixes and Improvements in 3.2.6.0

Table 3: 3.2.6.0 Fixes and Improvements

Fix Number	Description
3.2.6.0 - 01	Memory Optimized

5.1.4 Known Limitations of 3.2.6.0

Table 4: 3.2.6.0 Known Issues

Issue Number	Description
3.2.6.0 - 01	None

6 Release History

6.1 Version 3.2.4.0

6.1.1 Overview

This release note is for the AWS IoT reference which is based on SDK 3.2.4.0. It provides AWS IoT support for both the DA16200 device and the DA16600 module.

The AWS IoT reference includes improvements and new features listed in [Table 5](#) and bug fixes and improvements listed in [Table 6](#). For details on all changes in the AWS SDK 3.2.4.0, please see the release notes for SDK 3.2.4.0.

6.1.2 New and Updated Features of 3.2.4.0

Table 5: 3.2.4.0 New Features

Feature Number	Description
3.2.4.0 - 01	MCU OTA update for AT-CMD

6.1.3 Fixes and Improvements in 3.2.4.0

Table 6: 3.2.4.0 Fixes and Improvements

Fix Number	Description
3.2.4.0 / 01	Fixed the bug occurred when updating BLE image OTA
3.2.4.0 / 02	uart1_init_MCU() function bug fix
3.2.4.0 / 03	Updated to prevent exception

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6.1.4 Known Limitations of 3.2.4.0

Table 7: 3.2.4.0 Known Issues

Issue Number	Description
3.2.4.0 :: 01	None

6.2 Version 3.2.3.0

6.2.1 Overview

This release note is for the AWS IoT reference which is based on SDK 3.2.3.0. It provides AWS IoT support for both the DA16200 device and the DA16600 module.

The AWS IoT reference includes improvements and new features listed in [Table 8](#) and bug fixes and improvements listed in [Table 9](#). For details on all changes in the AWS SDK 3.2.3.0, please see the release notes for SDK 3.2.3.0.

6.2.2 New and Updated Features of 3.2.3.0

Table 8: 3.2.3.0 New Features

Feature Number	Description
3.2.3.0 - 01	Removed support for the Sensor Reference LED feature
3.2.3.0 - 02	Changed the feature names definitions used during provisioning from AWS_xxx to APP_xxx to be more generic

6.2.3 Fixes and Improvements in 3.2.3.0

Table 9: 3.2.3.0 Fixes and Improvements

Fix Number	Description
3.2.3.0 / 01	Code cleanup

6.2.4 Known Limitations of 3.2.3.0

Table 10: 3.2.3.0 Known Issues

Issue Number	Description
3.2.3.0 :: 01	None

6.3 Version 3.2.2.0

6.3.1 Overview

This release note is for the AWS IoT reference which is based on SDK 3.2.2.0. It provides AWS IoT support for both the DA16200 device and the DA16600 module.

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The AWS IoT reference includes improvements and new features listed in [Table 11](#) and bug fixes and improvements listed in [Table 12](#). For details on all changes in the AWS SDK 3.2.2.0, please see the release notes for SDK 3.2.2.0.

6.3.2 New and Updated Features of 3.2.2.0

Table 11: 3.2.2.0 New and Updated Features

Feature Number	Description
3.2.2.0 - 01	Added AWS IoT AT_CMD
3.2.2.0 - 02	Removed libdpm_thread_a file
3.2.2.0 - 03	Added app_dpm_thread.c file.

6.3.3 Fixes and Improvements in 3.2.2.0

Table 12: 3.2.2.0 Fixes and Improvements

Fix Number	Description
3.2.2.0 / 01	Fixed build error

6.3.4 Known Limitations of 3.2.2.0

Table 13: 3.2.2.0 Known Issues

Issue Number	Description
3.2.2.0 :: 01	None

6.4 Version 3.2.0.0

6.4.1 Overview

This release note is for the AWS IoT reference which is based on SDK 3.2.0.0. It provides AWS IoT support for both the DA16200 device and the DA16600 module.

The AWS IoT reference includes improvements and new features listed in [Table 14](#) and bug fixes and improvements listed in [Table 15](#). For details on all changes in the AWS SDK 3.2.0.0, please see the release notes for SDK 3.2.0.0.

6.4.2 New and Updated Features of 3.2.0.0

Table 14: 3.2.0.0 New and Updated Features

Feature Number	Description
3.2.0.0 - 01	Added AWS IoT reference
3.2.0.0 - 02	Changed NVRAM name from "AWS_THINGNAME" to "APP_THING_NAME"

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6.4.3 Fixes and Improvements in 3.2.0.0

Table 15: 3.2.0.0 Fixes and Improvements

Fix Number	Description
3.2.0.0 / 01	None

6.4.4 Known Limitations of 3.2.0.0

Table 16: 3.2.0.0 Known Limitations

Issue Number	Description
3.2.0.0 :: 01	Does not support 2MB SFLASH type.

6.5 Version 3.1.1.1

6.5.1 Overview

This is a full release of SDK V3.1.1.1 which supports the DA16200 device. It includes DPM daemon and related functions to support DA16200. Also, it updated and applied the previous known limitations and revision history of the SDK V3.1.1.0.

6.5.2 New and Updated Features of 3.1.1.1

Table 17: 3.1.1.1 New and Updated Features

Feature Number	Description
3.1.1.1 - 01	Added AWS IoT reference

6.5.3 Fixes and Improvements since 3.1.1.1

Table 18: 3.1.1.1 Fixes and Improvements

Fix Number	Description
3.1.1.1 / 01	Fixed the JSON (3rd party library source) omission from source tree
3.1.1.1 / 02	Fixed the floating-point type specifier (%f) not working

6.5.4 Known Limitations of 3.1.1.1

Table 19: 3.1.1.1 Known Limitations

Issue Number	Description
3.1.1.1 :: 01	Not support sensor reference board feature (<code>__SUPPORT_SENSOR_REF__</code> , <code>__DOORLOCK_ON_SENSOR_REF__</code>) in <code>sys_common_features.h</code> .

Issue Number	Description
3.1.1.1 :: 02	Not support doorlock reference board feature (<code>__SUPPORT_DOORLOCK_REF__</code>) in <code>sys_common_features.h</code> .
3.1.1.1 :: 03	Building SDK is not supported if the total string length of path including the project folder name exceeds 256.

Appendix A Software Versioning Rules

This describes the software version numbers and does not apply to documentation version numbers (as found in the footer of this document).

Each software version number string consists of four numbers: MAJOR. MINOR. REVISION. and ENGINEERING_REV.

#MAJOR: It is increased (by one only) if the project undergoes a major modification, for example OS changes. It usually changes only when the project sources undergo major restructuring affecting most of the repository. It is initialized at 1.

#MINOR: Used in the case of concurrent projects that for special reasons need to be spun off the major repository. It corresponds to different versions of the repository code that have to be supported concurrently. In this case, each branch number corresponds to a different GIT branch. The basic project has BRANCH id 0.

#REVISION: Full release versions. Each Full release increases this number by one. After the Full release, the number is increased by one again. Therefore, Project releases correspond to release numbers like X.Y.0.0, X.Y.1.0. etc. The #REVISION number is initialized at 0.

#ENGINEERING_REV: The # ENGINEERING_REV number increases by one at engineering update and thus indicates the total number of releases since the release of the official SDK package. The ENGINEERING_VERSION number is initialized at 0.

Document Revision History

This section summarizes the changes made to this document and not to the Software that this document describes.

Revision	Date	Description
3.2.6.0	22-Feb-2023	Patch Release 3.2.6.0
3.2.4.0	23-Sep-2022	Patch Release 3.2.4.0
3.2.3.0	03-Jun-2022	Patch Release 3.2.3.0
3.2.2.0	17-Mar-2022	Patch Release 3.2.2.0
3.2.0.0	30-Nov-2021	Patch Release 3.2.0.0
3.1.1.1	17-Jun-2021	Full Release 3.1.1.1

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Status Definitions

Status	Definition
DRAFT	The content of this document is under review and subject to formal approval, which may result in modifications or additions.
APPROVED or unmarked	The content of this document has been approved for publication.

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