DA16200 DA16600 AWS IoT Reference

This document contains the release notes for DA16200 and DA16600 AWS IoT Reference, version 3.2.8.0.

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1. Terms and Definitions

SDK	Software Development Kit
GA	General Access
LA	Limited Access
RTOS	Real Time Operating System
OTA	Over The Air

2. Release Data

Table 1. Release data

Device Number	DA16200/DA16600
Operating System	FreeRTOS
Operating System Version	10.4.3
Software Release Date	Sep. 07, 2023
Software Version Number	3.2.8.0
Software Release Type (Note 1)	PATCH

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

3. License

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

4. Related Documentation and References

[1] UM-WI-056, DA16200 DA16600, FreeRTOS Getting Started Guide, User Manual, Renesas Electronics.

[2] UM-WI-046, DA16200 DA16600, FreeRTOS Programmer Guide, User Manual, Renesas Electronics.

[3] UM-WI-042, DA16200 DA16600, Provisioning 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 Overview

This is a patch release of the AWS IoT reference example, which is based on SDK 3.2.8.0. It provides AWS IoT support for the DA16200 and 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 3.2.8.0, please see the release notes for Generic SDK 3.2.8.0.

5.2 New and Updated Features of 3.2.8.0

Table 2. 3.2.8.0 new features

Feature number	Description
3.2.8.0 - 01	Disabled Fleet Provisioning

5.3 Fixes and Improvements since 3.2.6.0

Table 3. 3.2.8.0 fixes and improvements

Fix Number	Description
N/A	N/A

5.4 Known Issues of 3.2.8.0

Table 4. 3.2.8.0 known issues

Issue number	Description
3.2.8.0 - 01	Not supporting Fleet Provisioning

5.5 Known Limitations of 3.2.8.0

Table 5. 3.2.8.0 known limitations

Issue number	Description
N/A	N/A

6. Release History

6.1 3.2.6.0

6.1.1 Overview

This is a patch release of the AWS IoT reference example, which is based on SDK 3.2.6.0. It provides AWS IoT support for the DA16200 and DA16600 module. It includes improvements and new features listed in Table 6 and bug fixes and improvements listed in Table 7.

6.1.2 New and Updated Features of 3.2.6.0

Table 6. 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

6.1.3 Fixes and Improvements since 3.2.4.0

Table 7. 3.2.6.0 fixes and improvements

Fix number	Description
3.2.6.0.- 01	Memory Optimized

6.1.4 Known Issues of 3.2.6.0

Table 8. 3.2.6.0 known issues

Issue number	Description
N/A	N/A

6.1.5 Known Limitations of 3.2.6.0

Table 9. 3.2.6.0 known limitations

Issue number	Description
N/A	N/A

6.2 3.2.4.0

6.2.1 Overview

This is a patch release of the AWS IoT reference example, which is based on SDK 3.2.4.0. It provides AWS IoT support for the DA16200 and DA16600 module. It includes improvements and new features listed in Table 10 and bug fixes and improvements listed in Table 11.

6.2.2 New and Updated Features of 3.2.4.0

Table 10. 3.2.4.0 new features

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

6.2.3 Fixes and Improvements since 3.2.3.0

Table 11. 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	Fixed uart1_init_MCU() function bug
3.2.4.0 - 03	Updated to prevent exception

6.2.4 Known Issues of 3.2.4.0

Table 12. 3.2.4.0 known issues

Issue number	Description
N/A	N/A

6.2.5 Known Limitations of 3.2.4.0

Table 13. 3.2.4.0 known limitations

Issue number	Description
N/A	N/A

6.3 3.2.3.0

6.3.1 Overview

This is a patch release of the AWS IoT reference example, which is based on SDK 3.2.3.0. It provides AWS IoT support for the DA16200 and DA16600 module. It includes improvements and new features listed in Table 14 and bug fixes and improvements listed in Table 15.

6.3.2 New and Updated Features of 3.2.3.0

Table 14. 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

6.3.3 Fixes and Improvements since 3.2.2.0

Table 15. 3.2.3.0 fixes and improvements

Fix number	Description
3.2.3.0 - 01	Code cleanup

6.3.4 Known Issues of 3.2.3.0

Table 16. 3.2.3.0 known issues

Issue number	Description
N/A	N/A

6.3.5 Known Limitations of 3.2.3.0

Table 17. 3.2.3.0 known limitations

Issue number	Description
N/A	N/A

6.4 3.2.2.0

6.4.1 Overview

This is a patch release of the AWS IoT reference example, which is based on SDK 3.2.2.0. It provides AWS IoT support for the DA16200 and DA16600 module. It includes improvements and new features listed in Table 18 bug fixes and improvements listed in Table 19.

6.4.2 New and Updated Features of 3.2.2.0

Table 18. 3.2.2.0 new 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.

6.4.3 Fixes and Improvements since 3.2.0.0

Table 19. 3.2.2.0 fixes and improvements

Fix number	Description
3.2.2.0 - 01	Fixed build error

6.4.4 Known Issues of 3.2.2.0

Table 20. 3.2.2.0 known issues

Issue number	Description
N/A	N/A

6.4.5 Known Limitations of 3.2.2.0

Table 21. 3.2.2.0 known limitations

Issue number	Description
N/A	N/A

6.5 3.2.0.0

6.5.1 Overview

This is a patch release of the AWS IoT reference example, which is based on SDK 3.2.0.0. It provides AWS IoT support for the DA16200 and DA16600 module. It includes improvements and new features listed in Table 22 and bug fixes and improvements listed in Table 23.

6.5.2 New and Updated Features of 3.2.0.0

Table 22. 3.2.0.0 new 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"

6.5.3 Fixes and Improvements since 3.2.0.0

Table 23. 3.2.0.0 fixes and improvements

Fix number	Description
N/A	N/A

6.5.4 Known Issues of 3.2.0.0

Table 24. 3.2.0.0 known issues

Issue number	Description
3.2.0.0 - 01	Does not support 2MB SFLASH type

6.5.5 Known Limitations of 3.2.0.0

Table 25. 3.2.0.0 known limitations

Issue number	Description
N/A	N/A

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. BRANCH. MINOR. and BUILD.

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

#BRANCH: 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.

#MINOR: Odd numbers indicate Engineering (or Patch or Binary) versions, even numbers indicate Full release versions or Release Candidates of Full 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 2.0.1.xxx, 2.0.2.xxx. etc. The #MINOR number is initialized at 1.

#BUILD: The # BUILD number increases by one at every repository update and thus indicates the total number of changes since repository initialization. The BUILD number is initialized at 1.

Document Revision History

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

Revision	Date	Description
3.2.8.0	Sep. 07, 2023	Patch Release 3.2.8.0
3.2.6.0	Feb. 22, 2023	Patch Release 3.2.6.0
3.2.4.0	Sep. 23, 2022	Patch Release 3.2.4.0
3.2.3.0	Jun. 03, 2022	Patch Release 3.2.3.0
3.2.2.0	Mar. 17, 2022	Patch Release 3.2.2.0
3.2.0.0	Nov. 30, 2021	Patch Release 3.2.0.0

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.

RoHS Compliance

Renesas Electronics' suppliers certify that its products are in compliance with the requirements of Directive 2011/65/EU of the European Parliament on the restriction of the use of certain hazardous substances in electrical and electronic equipment. RoHS certificates from our suppliers are available on request.