



RN0015

Release note

ZigBee® REva kit library package
release 1.0.0

Introduction

About these release notes

This is Rev 5 of the release notes for Release 1.0.0 of the ZigBee® REva Kit library. The library is designed to drive the SN260 (by STMicroelectronics) or EM260 (by Ember) and addresses some of the REva platform devices and capabilities. It is included in REva starter kits STZB_SK/RAIS and SN260_2SK/RAIS.

These release notes are updated periodically in order to keep you abreast of all software updates and of any problems or limitations found in this release. Check the ST Internet website for the latest version of these release notes.

Changes in the release notes for ZigBee REva Kit library Version 1.0.0

New Features	– Added support for STR91x microcontrollers
Corrections	– Refer to section Section 2.1: Summary of changes in release 1.0.0 on page 3
Limitations	– Refer to section Section 3: Known problems/limitations on page 4

Note: The ZigBee REva library kit package release 1.0.0 supports the EmberZNet stack 2.5.x

Customer support

For more information or help concerning this software, please refer to the ST Internet website.

Software updates

You can download software updates and all the latest documentation from the ST Internet website.

Contents

- 1 Read me first 3**
 - 1.1 Host PC system requirements 3

- 2 What's new in ZigBee REva Kit 1.0.0? 3**
 - 2.1 Summary of changes in release 1.0.0 3
 - 2.2 Hardware and targets supported by this release 3

- 3 Known problems/limitations 4**
 - 3.1 Known problems/limitations for ZigBee REva Kit installer 4
 - 3.2 Known problems/limitations for the RIDE toolset 4
 - 3.3 Known problems/limitations for ZigBee REva Kit library 4
 - 3.3.1 STR75x-STR91x microcontrollers problems/limitations 4
 - 3.3.2 ST7LITE39 microcontrollers problems/limitations 5

- 4 Information for major previous releases 6**
 - 4.1 Release 1.0.0 (April 2007) 6
 - 4.2 Release 1.0.0A2 (March 2007) 6
 - 4.3 Release 1.0.0A1 (January/February 2007) 6

- 5 Revision history 6**

1 Read me first

This chapter provides important information about this release.

1.1 Host PC system requirements

PC and compatibles running Windows 2000 or XP® operating systems.

Note: To install the RIDE (Raisonance Integrated Development Environment) used for building the ZigBee REva Kit library, users must have administrator privileges. To run the ZigBee REva Kit applications using the RIDE, users need to have power user or administrator privileges.

2 What's new in ZigBee REva Kit 1.0.0?

2.1 Summary of changes in release 1.0.0

New features

The ZigBee REva Kit library package Release 1.0.0 adds support for STR91x microcontrollers, keeping the support for STR71x, STR75xF and ST7LITE39 microcontrollers. The building system is designed to allow selection of the microcontroller (STR71xF, STR75xF, ST7LITE39 or STR91xF) and the rebuilding of the library to match the required microcontroller features.

For the ST7LITE39 microcontroller, specific RIDE library/projects are provided due to the different RIDE toolset environment settings between the STR7-STR9 and ST7 microcontrollers families.

Corrections/changes

The user is no longer required to define the SN260LIB_DIR environment variable for building the library and the application examples.

2.2 Hardware and targets supported by this release

The STZB_SK/RAIS and SN260_2SK/RAIS REva ZigBee starter kits for ST microcontrollers are supported. These kits include:

- Raisonance REva board v2.12
- RLink v.2.10
- REva daughter board (with the ST microcontroller)
- EM260 RCM module with the EM260 or SN260 silicon
- REva USB cable for programming the ST microcontroller (also providing power to the board).

The current release supports the STR71xF, STR75xF, ST7LITE39 and STR91xF microcontrollers.

3 Known problems/limitations

3.1 Known problems/limitations for ZigBee REva Kit installer

No known problems/limitations at this time.

3.2 Known problems/limitations for the RIDE toolset

The RIDE toolset has the following known limitation:

- The RIDE default library manager incorrectly builds the *.lib file (when used for the ST7LITE39 microcontroller). It does not use the clib utility even if the RIDE has been configured for using the Cosmic toolchain (GNBvd57597).

Issue analysis: the problem has been notified to the Raisonance support. They have provided the following solution when using the RIDE with the Cosmic toolchain:

Use a script (*make_library.wsc*) for running the clib utility and build the library image.

The *ezsp_hal_ST7.pri* project is already configured for using the *make_library.wsc* script, so the user is just required to double-click on this script after the "Project Build all" command has been performed.

3.3 Known problems/limitations for ZigBee REva Kit library

3.3.1 STR75x-STR91x microcontrollers problems/limitations

- The REva BT5 button does not work in Interrupt mode with STR75 microcontrollers (GNBvd57546).
Issue analysis: The STR75x external interrupt line 14 is not connected to the BT5 GPIO line (P1.14). A workaround is using the BT5 button in Polling mode.
- Using the REva ZigBee board with the STR75x microcontroller, the SN260 HOST_INT socket pin J2.40 is connected to the incorrect GPIO line (GNBvd57542).
Issue analysis: Wire the REva pin J2.40 to the REva SN260 socket pin J4.2 (to be used only with the REva board hosting the STR75x microcontroller. Remove this wire when using the REva board with other ST microcontrollers).

[Table 1](#) lists the HAL APIs currently not supported with STR75x-STR91x microcontrollers.

Table 1. HAL API support for STR75x-STR91x microcontrollers

HAL Features	HAL API not supported	Notes
micro.c	halPowerDown() halPowerUp() halResetWatchdog() halReboot() halSleep()	APIs not implemented with the current release since not required for targeting the ZigBee demo applications for the STR75x microcontroller.

3.3.2 ST7LITE39 microcontrollers problems/limitations

[Table 2](#) lists HAL APIs are not supported with the ST7LITE39 microcontroller.

Table 2. HAL API support for ST7LITE39 microcontroller

HAL Features	HAL API not supported	Notes
buzzer	halInternalInitBuzzer() halPlayTune_P()	Buzzer not required for targeting the ZigBee demo applications for the ST7LITE39 microcontroller.
micro.c	halPowerDown() halPowerUp() halResetWatchdog() halReboot() halSleep()	APIs not implemented with the current release since not required for targeting the ZigBee demo applications for the ST7LITE39 microcontroller.
system timer	halInternalInitTimer() halCommonGetInt16uMillisecondTick() halCommonGetInt32uMillisecondTick() halCommonSetSystemTime()	API not implemented with the current release since not required for targeting the ZigBee demo applications for the ST7LITE39 microcontroller

4 Information for major previous releases

4.1 Release 1.0.0 (April 2007)

New features

- Added support for the STR91xF microcontrollers

4.2 Release 1.0.0A2 (March 2007)

New features

- Added support for the STR75xF, ST7LITE39 microcontrollers

4.3 Release 1.0.0A1 (January/February 2007)

New features

- Initial release (supporting the STR71xF microcontrollers)

5 Revision history

Table 3.Revision history

Date	Revision	Changes
13-Feb-2007	1	Initial release for ZigBee REva Kit library package release 1.0.0A1
12-Mar-2007	2	ZigBee REva Kit library package release 1.0.0A2
02-Apr-2007	3	ZigBee REva Kit library package release 1.0.0
28-May-2007	4	Added support information for the EmberZNet stack 2.5.x
15-June-2007	5	STZB_SK/RAIS and SN260_2SK/RAIS REva starter kits added in Section : Introduction and Section 2.2: Hardware and targets supported by this release.

Please Read Carefully:

Information in this document is provided solely in connection with ST products. STMicroelectronics NV and its subsidiaries ("ST") reserve the right to make changes, corrections, modifications or improvements, to this document, and the products and services described herein at any time, without notice.

All ST products are sold pursuant to ST's terms and conditions of sale.

Purchasers are solely responsible for the choice, selection and use of the ST products and services described herein, and ST assumes no liability whatsoever relating to the choice, selection or use of the ST products and services described herein.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted under this document. If any part of this document refers to any third party products or services it shall not be deemed a license grant by ST for the use of such third party products or services, or any intellectual property contained therein or considered as a warranty covering the use in any manner whatsoever of such third party products or services or any intellectual property contained therein.

UNLESS OTHERWISE SET FORTH IN ST'S TERMS AND CONDITIONS OF SALE ST DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY WITH RESPECT TO THE USE AND/OR SALE OF ST PRODUCTS INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE (AND THEIR EQUIVALENTS UNDER THE LAWS OF ANY JURISDICTION), OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT.

UNLESS EXPRESSLY APPROVED IN WRITING BY AN AUTHORIZED ST REPRESENTATIVE, ST PRODUCTS ARE NOT RECOMMENDED, AUTHORIZED OR WARRANTED FOR USE IN MILITARY, AIR CRAFT, SPACE, LIFE SAVING, OR LIFE SUSTAINING APPLICATIONS, NOR IN PRODUCTS OR SYSTEMS WHERE FAILURE OR MALFUNCTION MAY RESULT IN PERSONAL INJURY, DEATH, OR SEVERE PROPERTY OR ENVIRONMENTAL DAMAGE. ST PRODUCTS WHICH ARE NOT SPECIFIED AS "AUTOMOTIVE GRADE" MAY ONLY BE USED IN AUTOMOTIVE APPLICATIONS AT USER'S OWN RISK.

Resale of ST products with provisions different from the statements and/or technical features set forth in this document shall immediately void any warranty granted by ST for the ST product or service described herein and shall not create or extend in any manner whatsoever, any liability of ST.

ST and the ST logo are trademarks or registered trademarks of ST in various countries.

Information in this document supersedes and replaces all information previously supplied.

The ST logo is a registered trademark of STMicroelectronics. All other names are the property of their respective owners.

© 2007 STMicroelectronics - All rights reserved

STMicroelectronics group of companies

Australia - Belgium - Brazil - Canada - China - Czech Republic - Finland - France - Germany - Hong Kong - India - Israel - Italy - Japan - Malaysia - Malta - Morocco - Singapore - Spain - Sweden - Switzerland - United Kingdom - United States of America

www.st.com