

STEVAL-IFS010V1

STR9 ZigBee® extension board for the SN260 network processor

Data Brief

Features

- Digital interfaces:
 - 16 general purpose I/Os (GPIOs)
 - One I²C bus interface
 - Two SPI bus interfaces: one is used to interface with the STR9 dongle and the other is available to extend the board with another SPI device
 - 2 external interrupts
- Digital MEMS in an LGA14 package (optional)
- 1 debug port
- 1 button and 2 LEDS

Description

The STR9 ZigBee extension board provides an SN260 ZigBee interface to an application using the STR9 dongle (part number STEVA) - IFD001V1).

The STMicroelectronics SN260 in agrates a 2.4 GHz, IEEE 802.15.4-compliant transceiver with a 16-bit network processor (YAP2b core) to run. EmberZNetTM, the 2"gBee-compliant network stack.

The SN260 accesses the EmberZi let API across a standard CPI module, allowing application development on a host processor. This means that the SN260 can be viewed as a ZigBee peripheral connected over an SPI. The XAP2b microprocessor is a power-optimized core integrated in the SN260. It contains integrated Flagn and RAM memory along with an optimized peripheral set to enhance the operation of the network stack. For additional information regarding the SN260, please refer to the device datasheet.

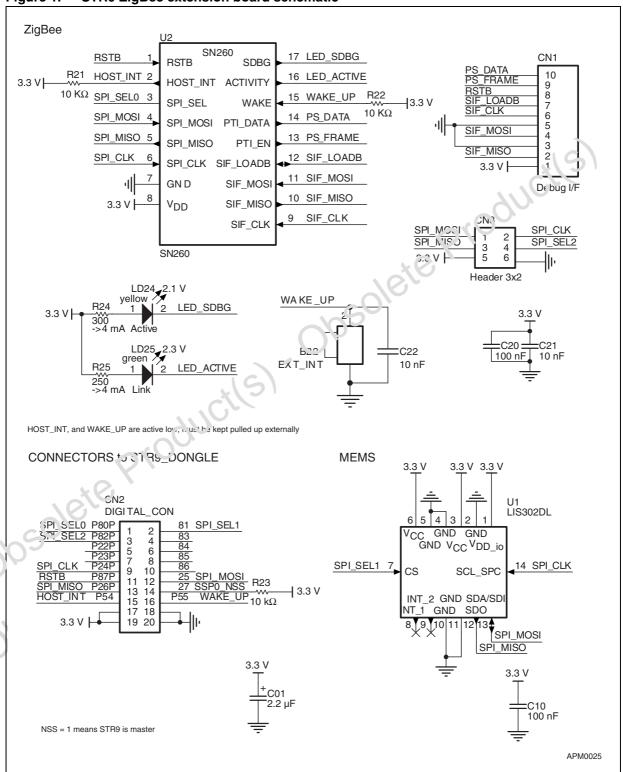
This document should be used in conjunction with user manual UM0282, which describes the STR9 dongle (part number STEVAL-IFD001V1).



Block diagram STEVAL-IFS010V1

1 Block diagram

Figure 1. STR9 ZigBee extension board schematic



STEVAL-IFS010V1 Revision history

2 Revision history

Table 1. Document revision history

Date	Revision	Changes
07-Jul-2008	1	Initial release.

Obsolete Products) Obsolete Products)
Obsolete Products) Obsolete Products

577

Please Read Carefully:

Information in this document is provided solely in connection with ST products. STMicroelectronics NV and its subsidiaties (ST") reserve the right to make changes, corrections, modifications or improvements, to this document, and the products and senuces 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 solvices 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 Liquits 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 containe 2 in a in any manner whatsoever of such third party products or services or any intellectual property containe 2 in a in a in a in a intellectual property containe 2 in a in a in a intellectual property containe 2 in a intellectual prop

UNLESS OTHERWISE SET FORTH IN ST'S TERMS AND CONDITIONS OF SALE ST DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY WITH RESPECT TO THE USE ANCION BALE OF ST PRODUCTS INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY, FITNE'SE 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 VIRITING 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 PRODUCT'S OR SYSTEMS WHERE FAILURE OR MALFUNCTION MAY RESULT IN PERSONAL INJURY, DEATH, OR SEVERE PF OP ENTY 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 S. p. or ucts with provisions different from the statements and/or technical features set forth in this document shall immediately void any war and granted by ST for the ST product or service described herein and shall not create or extend in any manner whatsoever, any liabi. To T.

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.

© 2008 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

577