



# BlueMod+S42 Pin Mapping

80507NT11495A Rev. 0 – 2016-08-16

**TELIT**  
**TECHNICAL**  
**DOCUMENTATION**

SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE

## **NOTICE**

While reasonable efforts have been made to assure the accuracy of this document, Telit assumes no liability resulting from any inaccuracies or omissions in this document, or from use of the information obtained herein. The information in this document has been carefully checked and is believed to be reliable. However, no responsibility is assumed for inaccuracies or omissions. Telit reserves the right to make changes to any products described herein and reserves the right to revise this document and to make changes from time to time in content hereof with no obligation to notify any person of revisions or changes. Telit does not assume any liability arising out of the application or use of any product, software, or circuit described herein; neither does it convey license under its patent rights or the rights of others.

It is possible that this publication may contain references to, or information about Telit products (machines and programs), programming, or services that are not announced in your country. Such references or information must not be construed to mean that Telit intends to announce such Telit products, programming, or services in your country.

## **COPYRIGHTS**

This instruction manual and the Telit products described in this instruction manual may be, include or describe copyrighted Telit material, such as computer programs stored in semiconductor memories or other media. Laws in the Italy and other countries preserve for Telit and its licensors certain exclusive rights for copyrighted material, including the exclusive right to copy, reproduce in any form, distribute and make derivative works of the copyrighted material. Accordingly, any copyrighted material of Telit and its licensors contained herein or in the Telit products described in this instruction manual may not be copied, reproduced, distributed, merged or modified in any manner without the express written permission of Telit. Furthermore, the purchase of Telit products shall not be deemed to grant either directly or by implication, estoppel, or otherwise, any license under the copyrights, patents or patent applications of Telit, as arises by operation of law in the sale of a product.

## **COMPUTER SOFTWARE COPYRIGHTS**

The Telit and 3rd Party supplied Software (SW) products described in this instruction manual may include copyrighted Telit and other 3rd Party supplied computer programs stored in semiconductor memories or other media. Laws in the Italy and other countries preserve for Telit and other 3rd Party supplied SW certain exclusive rights for copyrighted computer programs, including the exclusive right to copy or reproduce in any form the copyrighted computer program. Accordingly, any copyrighted Telit or other 3rd Party supplied SW computer programs contained in the Telit products described in this instruction manual may not be copied (reverse engineered) or reproduced in any manner without the express written permission of Telit or the 3rd Party SW supplier. Furthermore, the purchase of Telit products shall not be deemed to grant either directly or by implication, estoppel, or otherwise, any license under the copyrights, patents or patent applications of Telit or other 3rd Party supplied SW, except for the normal non-exclusive, royalty free license to use that arises by operation of law in the sale of a product.

## USAGE AND DISCLOSURE RESTRICTIONS

### I. License Agreements

The software described in this document is the property of Telit and its licensors. It is furnished by express license agreement only and may be used only in accordance with the terms of such an agreement.

### II. Copyrighted Materials

Software and documentation are copyrighted materials. Making unauthorized copies is prohibited by law. No part of the software or documentation may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language or computer language, in any form or by any means, without prior written permission of Telit

### III. High Risk Materials

Components, units, or third-party products used in the product described herein are NOT fault-tolerant and are NOT designed, manufactured, or intended for use as on-line control equipment in the following hazardous environments requiring fail-safe controls: the operation of Nuclear Facilities, Aircraft Navigation or Aircraft Communication Systems, Air Traffic Control, Life Support, or Weapons Systems (High Risk Activities"). Telit and its supplier(s) specifically disclaim any expressed or implied warranty of fitness for such High Risk Activities.

### IV. Trademarks

TELIT and the Stylized T Logo are registered in Trademark Office. All other product or service names are the property of their respective owners.

### V. Third Party Rights

The software may include Third Party Right software. In this case you agree to comply with all terms and conditions imposed on you in respect of such separate software. In addition to Third Party Terms, the disclaimer of warranty and limitation of liability provisions in this License shall apply to the Third Party Right software.

TELIT HEREBY DISCLAIMS ANY AND ALL WARRANTIES EXPRESS OR IMPLIED FROM ANY THIRD PARTIES REGARDING ANY SEPARATE FILES, ANY THIRD PARTY MATERIALS INCLUDED IN THE SOFTWARE, ANY THIRD PARTY MATERIALS FROM WHICH THE SOFTWARE IS DERIVED (COLLECTIVELY "OTHER CODE"), AND THE USE OF ANY OR ALL THE OTHER CODE IN CONNECTION WITH THE SOFTWARE, INCLUDING (WITHOUT LIMITATION) ANY WARRANTIES OF SATISFACTORY QUALITY OR FITNESS FOR A PARTICULAR PURPOSE.

NO THIRD PARTY LICENSORS OF OTHER CODE SHALL HAVE ANY LIABILITY FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING WITHOUT LIMITATION LOST PROFITS), HOWEVER CAUSED AND WHETHER MADE UNDER CONTRACT, TORT OR OTHER LEGAL THEORY, ARISING IN ANY WAY OUT OF THE USE OR DISTRIBUTION OF THE OTHER CODE OR THE EXERCISE OF ANY RIGHTS GRANTED UNDER EITHER OR BOTH THIS LICENSE AND THE LEGAL TERMS APPLICABLE TO ANY SEPARATE FILES, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

# APPLICABILITY TABLE

## PRODUCTS

- BLUEMOD+S42

## CONTENTS

<b>NOTICE .....</b>	<b>2</b>
<b>COPYRIGHTS .....</b>	<b>2</b>
<b>COMPUTER SOFTWARE COPYRIGHTS .....</b>	<b>2</b>
<b>USAGE AND DISCLOSURE RESTRICTIONS .....</b>	<b>3</b>
I. License Agreements .....	3
II. Copyrighted Materials .....	3
III. High Risk Materials .....	3
IV. Trademarks .....	3
V. Third Party Rights .....	3
<b>APPLICABILITY TABLE .....</b>	<b>4</b>
<b>CONTENTS .....</b>	<b>5</b>
1. INTRODUCTION .....	6
2. PIN MAPPING .....	9
3. GLOSSARY AND ACRONYMS .....	12
4. DOCUMENT HISTORY .....	13

## 1. INTRODUCTION

### 1.1. Scope

This documentation describes the mapping of BlueMod+S42 pins to the nRF52832 pins as required by software developers.

### 1.2. Audience

This document is intended for Telit customers, especially system integrators, about to implement Bluetooth modules in their application.

### 1.3. Contact Information, Support

For general contact, technical support services, technical questions and report documentation errors contact Telit Technical Support at:

- TS-SRD@telit.com

Alternatively, use:

<http://www.telit.com/support>

For detailed information about where you can buy the Telit modules or for recommendations on accessories and components visit:

<http://www.telit.com>

Our aim is to make this guide as helpful as possible. Keep us informed of your comments and suggestions for improvements.

Telit appreciates feedback from the users of our information.

## 1.4. Text Conventions

---



Danger – This information **MUST** be followed or catastrophic equipment failure or bodily injury may occur.

---

---



Caution or Warning – Alerts the user to important points about integrating the module, if these points are not followed, the module and end user equipment may fail or malfunction.

---

---



Tip or Information – Provides advice and suggestions that may be useful when integrating the module.

---

All dates are in ISO 8601 format, i.e. YYYY-MM-DD.

## 1.5. [Related Documents](#)

- BlueMod+S42 Hardware User Guide, 1VV0301303



## 2. PIN MAPPING

BlueMod+S42		nRF52832		
MODULE PIN	SIGNAL	WLCSP BALL	NAME	INTERNAL CONNECTED
A1	GPIO[10]	F2	P0.22	flex
A2	GPIO[9]	H2	P0.18 TRCDATA[0]	flex
A3	NFCANT1	G6	P0.09 NFC	static
A4	NFCANT2	G5	P0.10 NFC	static
A5	XL-OUT Analog In	C7	P0.01 XL2	static
A6	XL-IN Analog In	D7	P0.00 XL1	static
B2	GPIO[1] I2C_SDA Analog In	B5	P0.31 AIN7	flex
B3	GPIO[11] Analog In	G2	P0.20	flex
B4	IUR-OUT	E6	P0.04 AIN2	flex
C2	GPIO[13]	H4	P0.15 TRCDATA[2]	flex
C3	GPIO[7] Analog In	A3	P0.28 AIN4	flex
C4	GPIO[6] Analog In	D6	P0.03 AIN1	flex

BlueMod+S42		nRF52832		
MODULE PIN	SIGNAL	WLCSP BALL	NAME	INTERNAL CONNECTED
D1	GPIO[2] SPI_MOSI	H5	P0.14 TRCDATA[3]	flex
D2	UART-RXD	G4 F4	P0.13 P0.11	flex
D3	GPIO[0] I2C_SCL Analog In/Ref	B4	P0.27	flex
D4	GPIO[4]	A5	P0.30 AIN6	flex
D5	IUR-IN#	A4	P0.29 AIN5	flex
D7	UART-RTS#	F6	P0.07	flex
E1	BOOT0 Analog In	B3	P0.25	flex
E2	GPIO[8] SPI_SCK Analog In	F7	P0.06	flex
E4	GPIO[3]	C6	P0.02 AIN0	flex
E5	GPIO[12]	H3	P0.16 TRCDATA[1]	flex
F1	TESTMODE# Analog In	G7	P0.08	flex
F2	GPIO[5] SPI_MISO Analog Ref	E7	P0.05 AIN3	flex
F3	UART-CTS#	H6	P0.12	flex

BlueMod+S42		nRF52832		
MODULE PIN	SIGNAL	WLCSP BALL	NAME	INTERNAL CONNECTED
F4	UART-TXD	G3	P0.17	flex
F5	GPIO[14]	D3	P0.26	flex

### 3. GLOSSARY AND ACRONYMS

	Description
TTSC	Telit Technical Support Centre
USB	Universal Serial Bus
NFC	Near Field Communication
DTE	Data Terminal Equipment
UART	Universal Asynchronous Receiver Transmitter
SPI	Serial Peripheral Interface
ADC	Analog – Digital Converter
DAC	Digital – Analog Converter
I/O	Input Output
GPIO	General Purpose Input Output
CLK	Clock
MOSI	Master Output – Slave Input
MISO	Master Input – Slave Output
CS	Chip Select
RTC	Real Time Clock

#### 4. DOCUMENT HISTORY

Revision	Date	Changes
0	2016-08-16	First issue



# SUPPORT INQUIRIES

Link to **[www.telit.com](http://www.telit.com)** and contact our technical support team for any questions related to technical issues.

**[www.telit.com](http://www.telit.com)**



Telit Communications S.p.A.  
Via Stazione di Prosecco, 5/B  
I-34010 Sgonico (Trieste), Italy

Telit IoT Platforms LLC  
5300 Broken Sound Blvd, Suite 150  
Boca Raton, FL 33487, USA

Telit Wireless Solutions Inc.  
3131 RDU Center Drive, Suite 135  
Morrisville, NC 27560, USA

Telit Wireless Solutions Co., Ltd.  
8th FL., Shinyoung Securities Bld.  
6, Gukjegeumyung-ro8-gil, Yeongdeungpo-gu  
Seoul, 150-884, Korea

Telit Wireless Solutions Ltd.  
10 Habarzel St.  
Tel Aviv 69710, Israel

Telit Wireless Solutions  
Tecnologia e Servicos Ltda  
Avenida Paulista, 1776, Room 10.C  
01310-921 São Paulo, Brazil

Telit reserves all rights to this document and the information contained herein. Products, names, logos and designs described herein may in whole or in part be subject to intellectual property rights. The information contained herein is provided "as is". No warranty of any kind, either express or implied, is made in relation to the accuracy, reliability, fitness for a particular purpose or content of this document. This document may be revised by Telit at any time. For most recent documents, please visit [www.telit.com](http://www.telit.com)

Copyright © 2016, Telit

Mod. 0809 2016-08 Rev.7