

STEVAL-SPBT3ATV3

USB dongle for the Bluetooth® class 2 SPBT2632C2A.AT2 module

Data brief

Features

- Based on a V3.0 Bluetooth® class 2 module SPBT2632C2A.AT2
- USB interface and power supply
- Supports reprogrammability via USB interface
- Reset button
- Antenna onboard
- RoHS compliant

Description

The STEVAL-SPBT3ATV3 demonstration board is a design tool to evaluate the SPBT2632C2A.AT2 module in a quick and simple way.

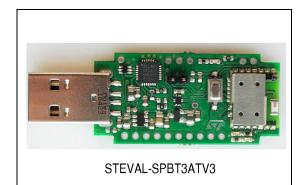
The dongle includes the RF antenna and the USB connector.

The USB connector is used to connect the dongle to a PC, to access the Bluetooth® module, and to supply the dongle.

The STEVAL-SPBT3ATV3 includes downloaded FW, enabling the user to create a Bluetooth® link with simple AT commands. The AT command list is detailed in the User Manual UM1547.

The AN4127 application note describes how to get started with the STEVAL-SPBT3ATV3.

The SPBT2632C2A.AT2-based dongle is a demonstration tool only, to be used strictly for evaluation purposes. It is not a product in itself.



Contents STEVAL-SPBT3ATV3

Contents

1	Recommended operating conditions	3
2	Dongle layout	4
3	I/O connections	
4	Dongle schematic	
5	Revision history	7



1 Recommended operating conditions

Table 1. Recommended operating conditions

Symbol	Parameter	Conditions	Min.	Тур.	Max.	Unit
VDD	Board supply voltage	-40 °C < T < 85 °C	4.5	5	5.5	V
Тор	Operating case temperature range		-40		+85	°C

Dongle layout STEVAL-SPBT3ATV3

2 Dongle layout

Figure 1. Dongle component layout, front side

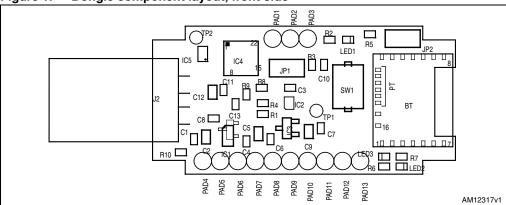
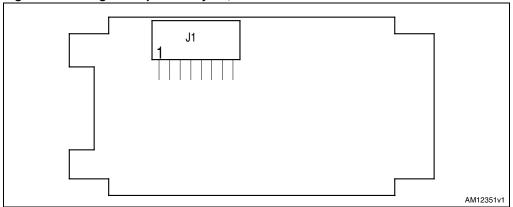


Figure 2. Dongle component layout, bottom side



4/8 Doc ID 023290 Rev 2

STEVAL-SPBT3ATV3 I/O connections

3 I/O connections

3.1 PAD description

Other than the USB plug, some pads are also available. In fact, pads PAD1 to PAD13 make the SPBT2632C2A.AT2 pins available to the user.

Figure 3. Available pads

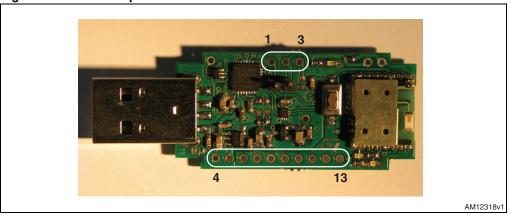


Table 2 gives a description of these pads.

Table 2. Pad connections

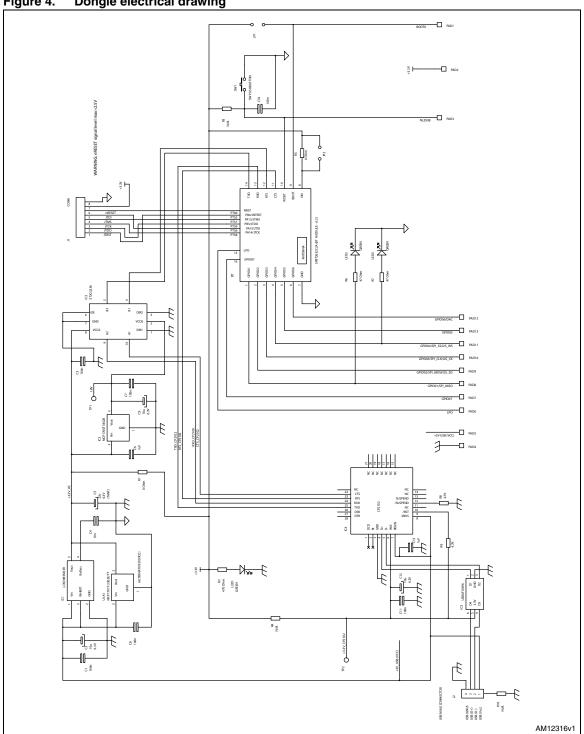
7										
Description										
	1	BOOT0 - Boot pin used for firmware downloading - used for testing purposes								
	2	3.3 V (module – LED1 is connected to this PAD)								
	3	RESETN - reset - connected in parallel to onboard reset switch								
	4	GND								
	5	+5 V (USB)								
(PAD)	6	LPO (external 32.768 kHz frequency input to allow deep sleep and sniff mode Bluetooth module functional states)								
	7	GPIO07 – general purpose I/O								
	8	GPIO01 – general purpose I/O (see note) (LED2 is connected to this GPIO)								
	9	GPIO02 – general purpose I/O (see note)								
	10	GPIO03 – general purpose I/O (see note)								
	11	GPIO04 – general purpose I/O (see note) (LED3 is connected to this GPIO)								
	12	GPIO06 – general purpose I/O see note)								
	13	GPIO05 – general purpose I/O								

Note: Default configuration - different configurations can be chosen (see datasheet).

Dongle schematic STEVAL-SPBT3ATV3

4 Dongle schematic

Figure 4. Dongle electrical drawing



6/8 Doc ID 023290 Rev 2

STEVAL-SPBT3ATV3 Revision history

5 Revision history

Table 3. Document revision history

Date	Revision	Changes
12-Jun-2012	1	Initial release.
25-Jun-2012	2	Modified: photo in the cover page, description, Figure 1 and 4

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8/8 Doc ID 023290 Rev 2

