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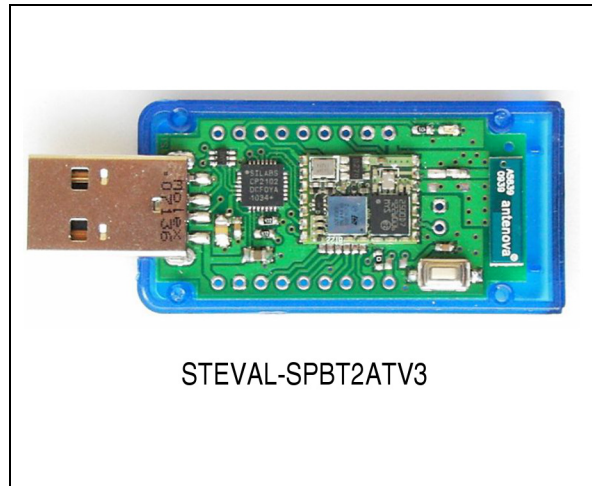
STEVAL-SPBT2ATV3

USB dongle for the Bluetooth® class 2 SPBT2532C2.AT2 module

Data brief

Features

- Based on the SPBT2532C2.AT2 class 2 module
- Bluetooth® specification compliant V2.1+EDR
- USB interface and power supply
- Supported reprogrammability via USB interface
- SMD antenna and reset button onboard
- User interface: AT2 command set supporting data communication with Android smartphone and Apple iOS Bluetooth® enabled devices
- RoHS compliant



Description

The STEVAL-SPBT2ATV3 demonstration board is a design tool to evaluate the SPBT2532C2.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-SPBT2ATV3 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 AN3189 application note describes how to get started with the STEVAL-SPBT2ATV3.

The SPBT2532C2.AT2-based dongle is a demonstration tool only, to be used strictly for evaluation purposes. It is not a product in itself.

1 Recommended operating conditions

Table 1. Recommended operating conditions

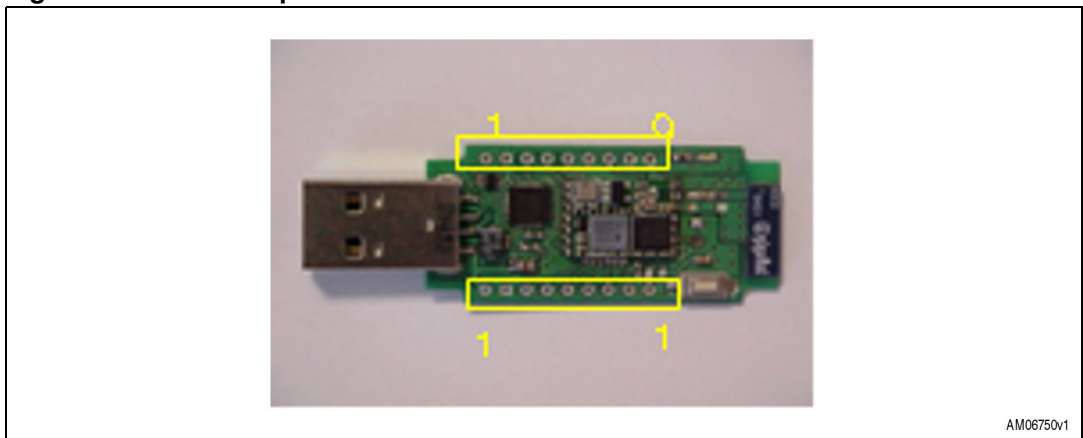
Symbol	Parameter	Conditions	Min.	Typ	Max	Unit
VDD	Board supply voltage	-40 °C < T < 85 °C	4	5	6	V
Top	Operating case temperature range		-40		+85	°C

2 I/O connections

2.1 PAD description

Other than the USB plug, some pads are also available. In fact TP1 and TP2 pads make the SPBT2532C2.AT2 pins available to the user.

Figure 1. Available pads



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[Table 2](#) lists the meaning of these pads.

Table 2. Pad connections

Pads		Description
TP	1	Reset - connected in parallel to onboard reset switch
	2	SPBT2532C2.AT2 supply voltage
	3	Boot pin - used for firmware downloading - used for testing purposes
	4	GPIO01 - general purpose I/O – LED5 is connected to this pin
	5	GPIO02 - general purpose I/O – LED4 is connected to this pin
	6	GPIO03 - general purpose I/O – LED3 is connected to this pin
	7	GPIO04 - general purpose I/O – LED2 is connected to this pin
	8	GND
	9	GND
	10	USB + (5 V)
	11	GND
	12	Used for testing purposes
	13	Used for testing purposes
	14	Used for testing purposes
	15	Used for testing purposes
	16	Used for testing purposes
	17	Used for testing purposes
	18	3.3 V

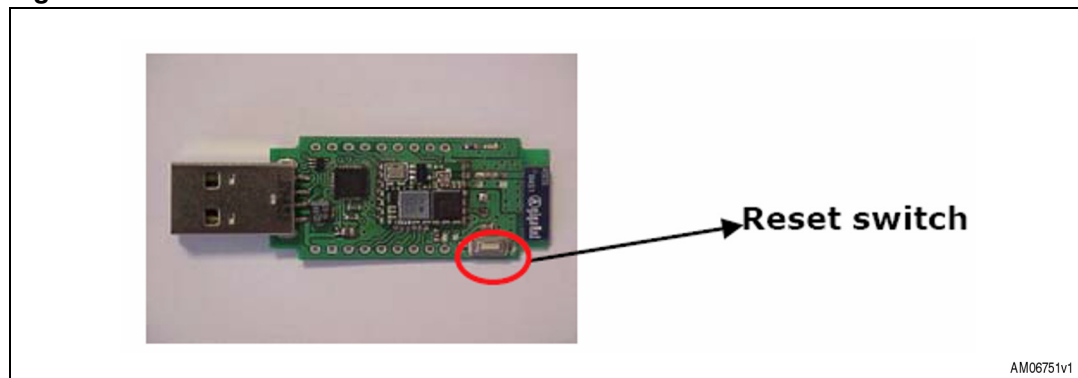
2.2 Reset switch

A reset switch SW1 is present on the dongle. When SW1 is pushed SPBT2532C2.AT is forced to reset.

The following prompt is displayed on the screen:

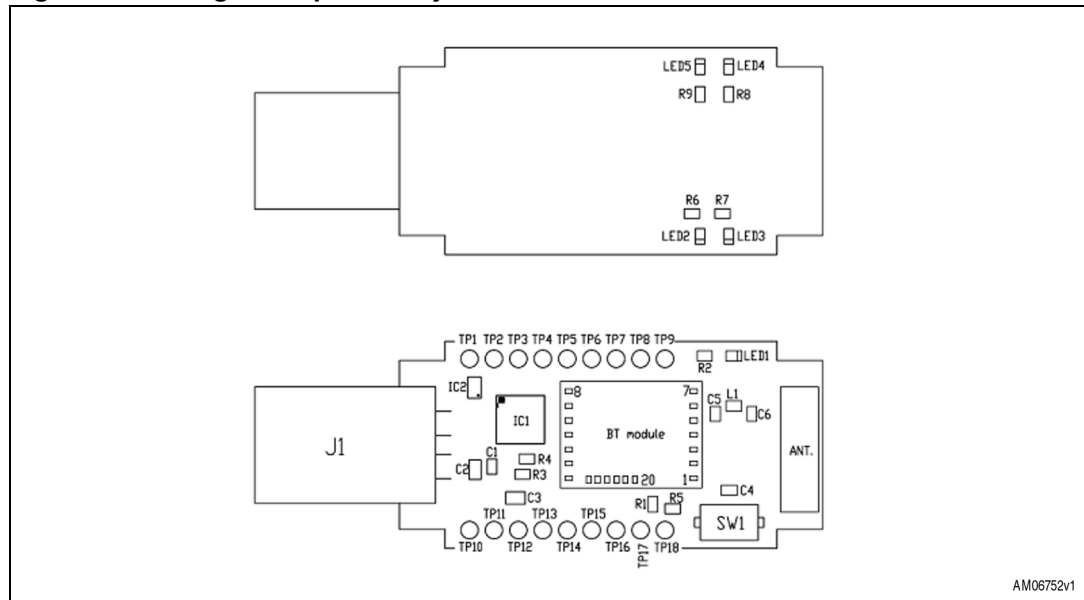
- AT-AB - command mode
- AT-AB BDAAddress xxxxxxxxxxxx

Figure 2. Reset switch



3 Dongle layout

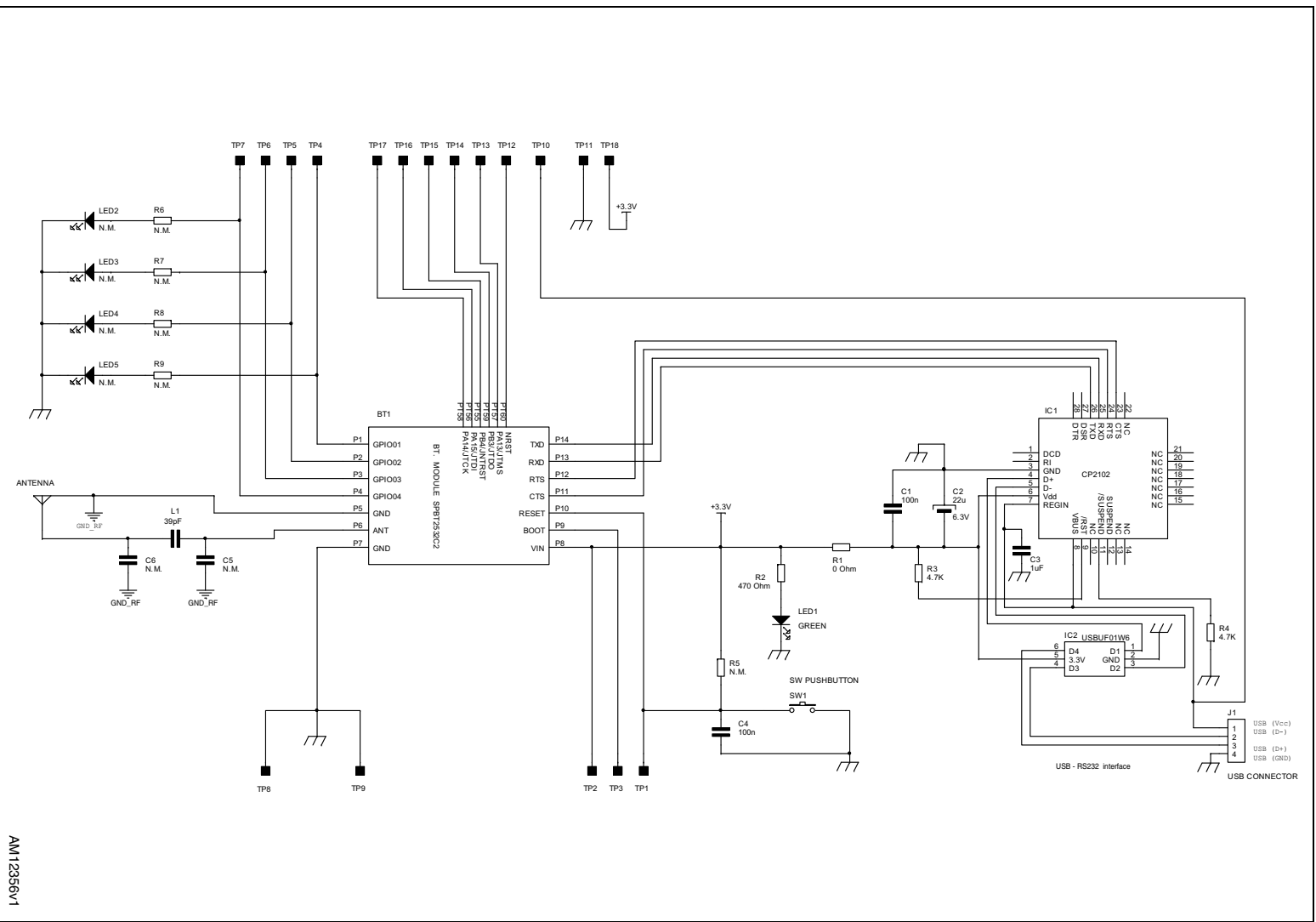
Figure 3. Dongle component layout



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4 Dongle schematic

Figure 4. Dongle electrical drawing



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5 Revision history

Table 3. Document revision history

Date	Revision	Changes
11-Jun-2012	1	Initial release.
25-Jun-2012	2	– Title and description modified to improve readability – Added: <i>Section 1: Recommended operating conditions</i> and <i>Section 2: I/O connections</i>

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