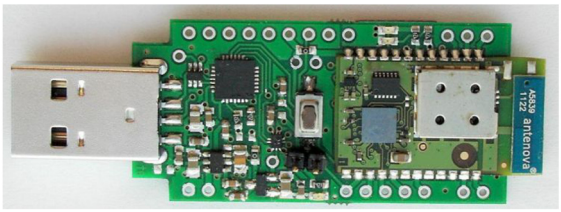
STEVAL-SPBT4ATV3

USB dongle for the Bluetooth® class 1 SPBT2632C1A.AT2 module

Data brief

Features

- Based on V3.0 Bluetooth® class 1 module, SPBT2632C1A.AT2
- USB interface and power supply
- Supported reprogrammability via USB interface
- Reset button
- Antenna onboard
- RoHS compliant



STEVAL-SPBT4ATV3

Description

The STEVAL-SPBT4ATV3 demonstration board is a design tool to evaluate the SPBT2632C1A.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-SPBT4ATV3 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 AN4128 application note describes how to get started with the STEVAL-SPBT4ATV3.

The SPBT2632C1A.AT2-based dongle is a demonstration tool only, to be used strictly for evaluation purposes. It is not a product in itself.

Contents

1 Recommended operating conditions

Table 1. Recommended operating conditions

Symbol	Parameter	Conditions	Min.	Typ.	Max.	Unit
V_{DD}	Board supply voltage	-40 °C < T < 85 °C	4.5	5	5.5	V
Top	Operating case temperature range		-40		+85	°C

2 Dongle layout

Figure 1. Dongle component layout, front side

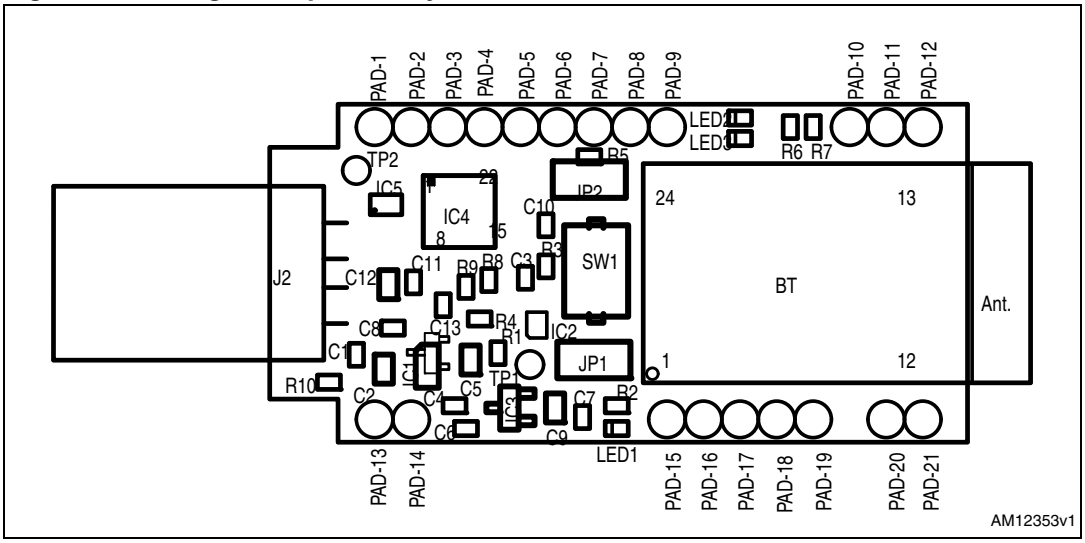
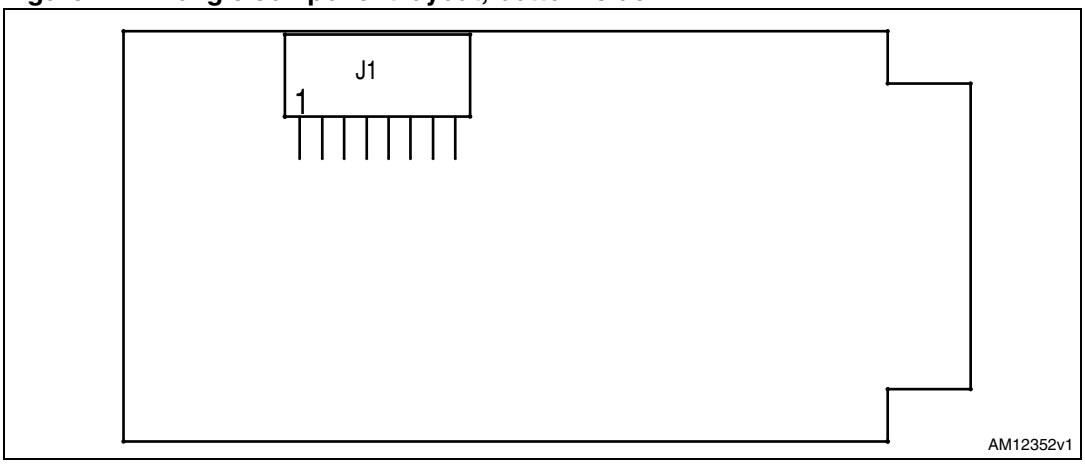


Figure 2. Dongle component layout, bottom side



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

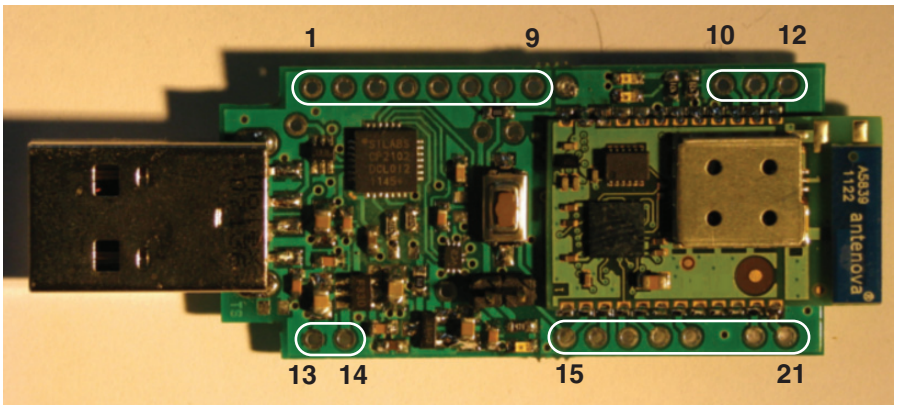


Table 2 gives a description of these pads.

Table 2. Pad connections

		Description
PAD	1	GPIO05 - general purpose I/O (see note)
	2	GPIO04 - general purpose I/O (see note) (LED2 is connected to GPIO4)
	3	GPIO06 - general purpose I/O (see note)
	4	GPIO15 - general purpose I/O (see note)
	5	GPIO02 - general purpose I/O (see note)
	6	+3.3 V (module) (LED1 is connected to module power)
	7	GPIO03 - general purpose I/O (see note)
	8	GPIO01 - general purpose I/O (see note) (LED3 is connected to GPIO1)
	9	GPIO00 - general purpose I/O (see note)
	10	GPIO13 - general purpose I/O
	11	GPIO14 - general purpose I/O
	12	GPIO07 - general purpose I/O (see note)
	13	GND
	14	+5 V (USB)
	15	BOOT0 (Boot pin used for firmware downloading - used for testing purpose)
	16	RESET - connected in parallel to onboard reset switch

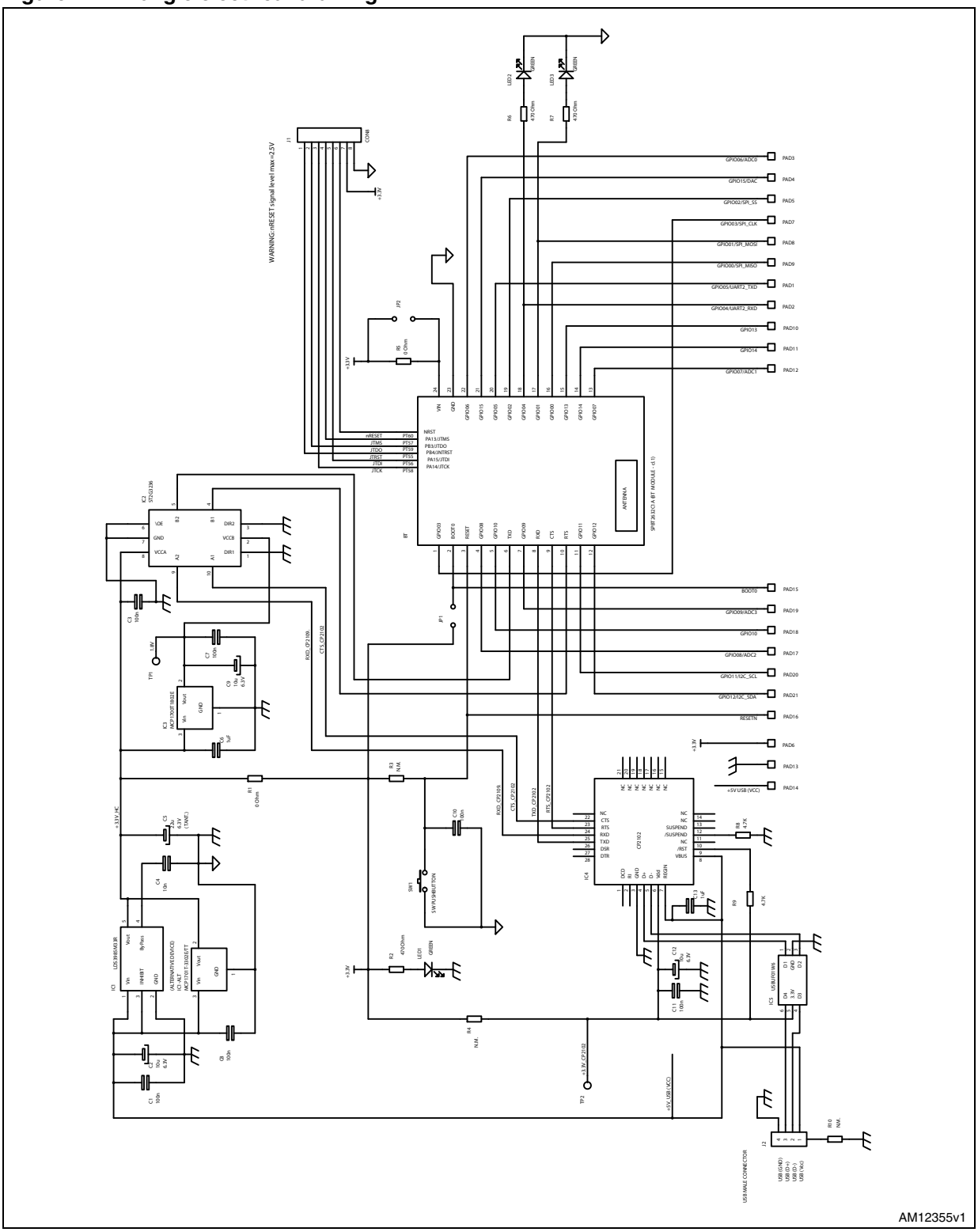
Table 2. Pad connections (continued)

Description		
PAD	17	GPIO08 - General purpose I/O (*)
	18	GPIO10 - General purpose I/O
	19	GPIO09 - General purpose I/O (*)
	20	GPIO11 - General purpose I/O (*)
	21	GPIO12 - General purpose I/O (*)

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

4 Dongle schematic

Figure 4. Dongle electrical drawing



5 Revision history

Table 3. Document revision history

Date	Revision	Changes
25-Jun-2012	1	Initial release.

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