



This document is the property of Silicon Labs. The data contained herein, in whole or in part, may not be duplicated, used or disclosed outside the Recipient for any purpose other than to conduct technical evaluation. This restriction does not limit the Recipient's right to use information contained in the data if it is obtained from another source without restriction.

BILL OF MATERIAL

Doc Number	BOM12538-4
Doc Description	BOM, UZB-SD3503 EU
Description	-

Revision	4A
Date	27/5/2015

Release Restriction	Partner
---------------------	---------

R&D History

Ver	Date	Description
1A	27-May-13	1. First release
2A	6-Jun-13	1. Add Silicon Labs logo and confidentiality statements
3A	26-Sep-13	1. Added in USB Certified Connector 2. Change Antenna Description
4A	27-May-15	1. Change Serial Flash from 1Mbit to 2Mbit 2. Added alternative part for crystal

Project Name: UZB-SD3503 EU

Kit Number: N.A.

Revision No: Rev 4A

Date: 27-May-2015

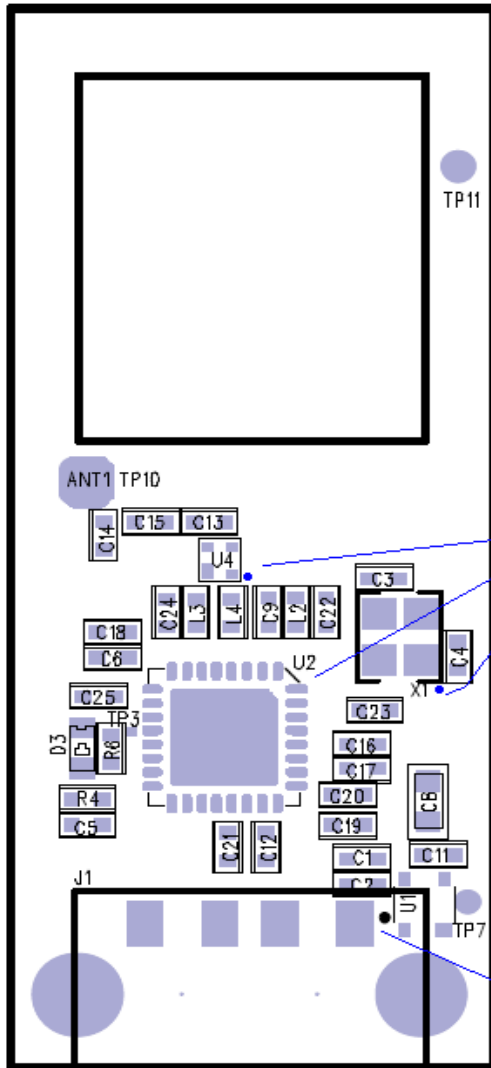
UZB-SD3503 EU

#	Qty	Ref	Value	Description	Decal	Manufacture Part #	Manufacturer
IC							
1	1	U2	SD3503	IC SD3503 Single Chip, QFN32,	QFN32	-	Sigma Design
2	1	U1	3.3V	IC LDO 3.3V 150mA XC6213	SSOT-24	XC6213B332NR	Torex
3	1	U4	868MHz	IC SAW 868MHz BW=25MHz	4-Pin	SF1010-02-SX	-
4	1	U3	2Mbit	IC SERIAL FLASH SPI 2Mbit 75MHz	SSOP-8	M25PE20-VMN6P	ST/Numonyx
CAPACITORS							
5	1	C9	4.3pF	Cap. Cer., +/-0.25pF, 0402, 4.3pF, NP0, 50V	0402C	GRM1555C1H4R3CA01D	Murata
6	2	C3,C4	20pF	Cap. Cer., 2%, 0402, 20pF, NP0, 50V	0402C	GRM1555C1H200GA01D	Murata
7	1	C26	33pF	Cap Cer Multilayer 33pF 50V 5% 0402 COG	0402C	GRM1555C1H330JZ01	Murata
				Cap Cer Multilayer 33pF 25V 5% 0402 COG		GRM1555C1E330JA01D	Murata
8	2	C22, C24	47pF	Cap Cer Multilayer 47pF 5% 50V 0402 COG	0402C	GRM1555C1H470JZ01D	Murata
				Cap Cer Multilayer 47pF 25V 5% 0402 COG	0402C	GRM1555C1E470JA01D	Murata
9	2	C12, C16	6.8nF	Cap Cer Multilayer 6.8nF 25V 10% 0402 X7R	0402C	GRM155R71E682KA01	Murata
10	1	C6	10nF	Cap Cer Multilayer 10nF 16V 10% 0404 X7R	0402C	GRM155R71C103KA01D	Murata
11	2	C10, C11	33nF	Cap Cer Multilayer 33nF 10V 10% 0402 X7R	0402C	GRM155R71A333KA01D	Murata
12	6	C17, C19 C20, C21 C23, C25	47nF	Cap Cer Multilayer 47nF 16V 10% 0402 X7R	0402C	EMK105B7473KV-F	Yageo
				Cap Cer Multilayer 47nF 16V 10% 0402 X7R	0402C	GRM155R71A473KA01D	Murata
				Cap Cer Multilayer 47nF 25V 10% 0402 X7R	0402C	GRM155R71E473KA88D	Murata
13	2	C2, C5	100nF	Cap Cer Multilayer 100nF 10V 10% 0402 X7R	0402C	GRM155R71A104KA01D	Murata
14	1	C18	1uF	Cap Cer Multilayer 1uF 4V 10% 0402 X5R	0402C	GRM155C80G105KE19D	Murata
				Cap Cer Multilayer 1uF 6.3V 20% 0402 X5R	0402C	GRM155R60J105ME19D	Murata
15	1	C1	4.7uF	Cap Cer Multilayer 4.7uF 6.3V 20% X5R	0402C	JMK105BBJ475MV-F	Taiyo Yuden
16	2	C7, C8	10uF	Cap Cer Multilayer 10uF 6.3V 20% 0603 X5R	0603C	GRM188R60J106ME47D	Murata
						CC0603MRX5R5BB106	Yageo
						06036D106MAT2A	AVX
17	1	C13	7pF	Cap Cer Multilayer 7pF 50V +/-0.25pF 0402 COG	0402C	GJM1555C1H7R0CB01	Murata
18	1	C14	7.5pF	Cap Cer Multilayer 7.5pF 50V +/-0.25pF 0402 COG	0402C	GJM1555C1H7R5CB01	Murata
RESISTOR							
19	2	R1,R2	27R	Res Thick Film 27 ohm 1/16W ±5% 0402	0402R	RC0402JR-0727RL	Yageo
20	1	R3	1K5	Res Thick Film 1k5 ohm 1/16W ±5% 0402	0402R	RC0402JR-071K5L	Yageo

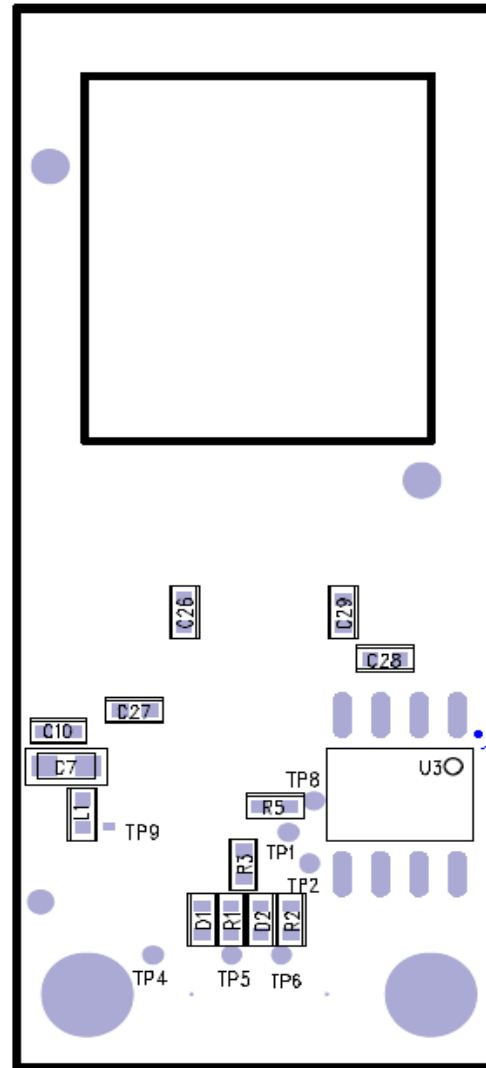
21	1	R6	10k	Res Thick Film 10k ohm 1/16W ±5% 0402	0402R	RC0402JR-0710KL MCR01MZPJ103 MCR01MRTJ103	Yageo Rohm Rohm
22	1	R5	22K	Res Thick Film 22k ohm 1/16W ±5% 0402	0402R	RC0402JR-0722KL MCR01MZPJ223	Yageo Rohm
OTHERS							
23	1	X1	32MHz	X-tal, 32 MHz, 12pF, +/-25PPM total, 2.5*2.0mm	FA-20H	QD2750-05-SX CLJA414320709-SX	EPSON
24	1	L1	1k 100M	FB,EMI FILTER 1k@100MHz 250mA	0402L	BLM15HG102SN1D	Murata
25	1	L2	6.2nH	IND,RF 6.2nH 2% 0402	0402L	LQP15MN6N2B02	Murata
26	1	C15	6.8nH	IND,6.8nH +/- 2% 0402	0402L	LQP15MN6N8B02	Murata
27	1	L4	12nH	IND,RF 12nH 2% 0402	0402L	LQP15MN12NG02	Murata
28	1	L3	22nH	IND,RF 22nH 2% 0402	0402L	LQP15MN22NG02	Murata
29	1	ANT1	-	ANT, UZB Helix	Helix	-	Hersey
CONNECTOR							
30	1	J1	-	Conn, USB-A MALE PLUG SMT	-	JC0015-M UAR70-4K5J1J	Kingmate (No USB TID) ACON (USB TID 60000062)
31	1	-	-	PCB, UZB-SD3503 4L Rev 1.0 (P2)	-		
32	1	-	-	Casing, USB P1A-180804U (White)	-	P1A-180804U	New Age Enclosures
NOT MOUNTED							
33	3	C27,C28 C29	33pF	Cap Cer Multilayer 33pF 50V 5% 0402 COG Cap Cer Multilayer 33pF 25V 5% 0402 COG	0402C	GRM1555C1H330JZ01 GRM1555C1E330JA01D	Murata
34	2	D1,D2	-	ESD,0402 Cer .05PF 15KV ESD,0402 USB Varistor	0402D 0402D	LXES15AAA1-017 USB0005DP	Murata AVX
35	1	D3	GREEN	LED, 0603 GREEN 5mA	SMD0603	19-213/G6C-BJ1K2VY/3T	Everlight
36		R4	1K	Res Thick Film 1K ohm 1/16W ±5% 0402	0402R	RC0402JR-071K5RL	Yageo

Assembly Instruction:

- 1 Top & Bottom (Pin 1 location, and orientation)

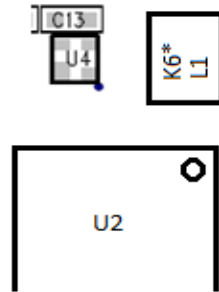


U4 Chip Marking:
 1. EU K66
 2. US K67
 3. ANZ-JPN920 K90



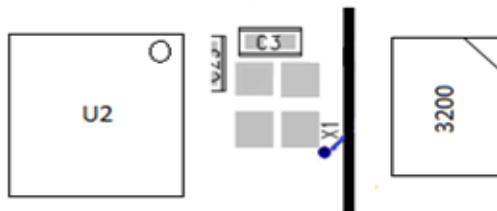
2 Assembly Note on U4

- a) Pad with longer pad is Pin 4
- b) After mounting, U4 marking (K6*) Orientation is as follows,



3 Assembly Note on X1

- a) Pad with slanted corner is Pin 2
- b) After mounting, X1 Marking (3200) Orientation is as follows,



- 4 For Ant 1 Mounting, refer to the reference board.

- 5 For UZB-SD3503 No SAW Bom
Mount 0R on the U4 pads, as shown in the following drawing.

