



EFR32 Mighty Gecko Radio Board

2.4 GHz 19 dBm, VMCU to PAVDD


Board Function	Page
Title Page	1
RF, Antenna & Power	2
EFR32 Signal Assignments	3
WSTK Connectors & Board ID	4

LEGAL NOTICE:
SILICON LABORATORIES INC. ("SILICON LABS") AND/OR ITS LICENSORS DO NOT WARRANT THE ACCURACY OR COMPLETENESS OF THIS SCHEMATIC OR ANY INFORMATION CONTAINED WITHIN THIS SCHEMATIC. IT IS PROVIDED "AS-IS" FOR REFERENCE ONLY. SILICON LABS DOES NOT WARRANT THAT THIS DESIGN WILL MEET THE SPECIFICATIONS, BE SUITABLE FOR YOUR APPLICATION OR FIT FOR ANY PARTICULAR PURPOSE, OR WILL OPERATE IN YOUR IMPLEMENTATION. SILICON LABS AND ITS LICENSORS DO NOT WARRANT THAT THE DESIGN IMPLIED IN THIS SCHEMATIC IS PRODUCTION-WORTHY. YOU SHOULD COMPLETELY VALIDATE AND TEST YOUR DESIGN IMPLEMENTATION TO CONFIRM SYSTEM FUNCTIONALITY FOR YOUR APPLICATION.

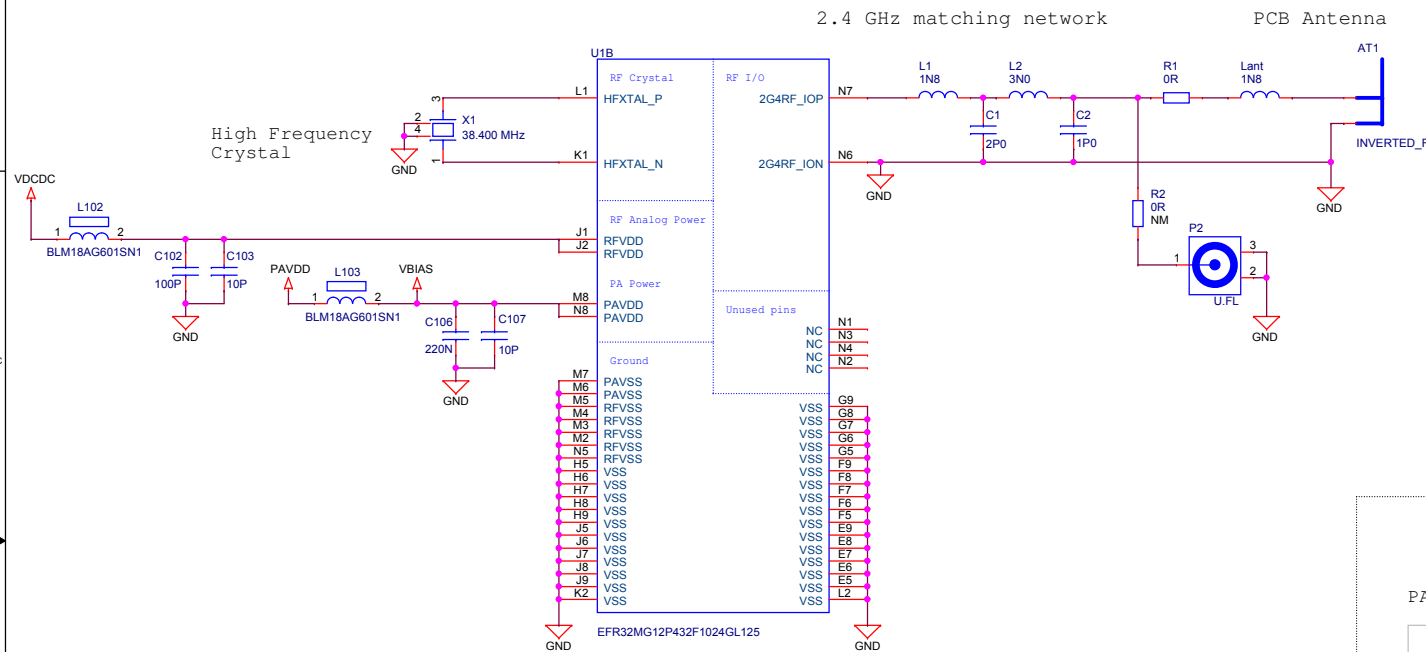


Revision History	
Rev.	Description
A00	Initial version.
A01	Updated EFR32 chip revision and 32 kHz crystal part number.
A02	Fixing EFR32 pin names; Adding antenna tuning.
A03	Updated EFR32 & PCB rev. Fixed 32 kHz crystal P/N. Added Lant.

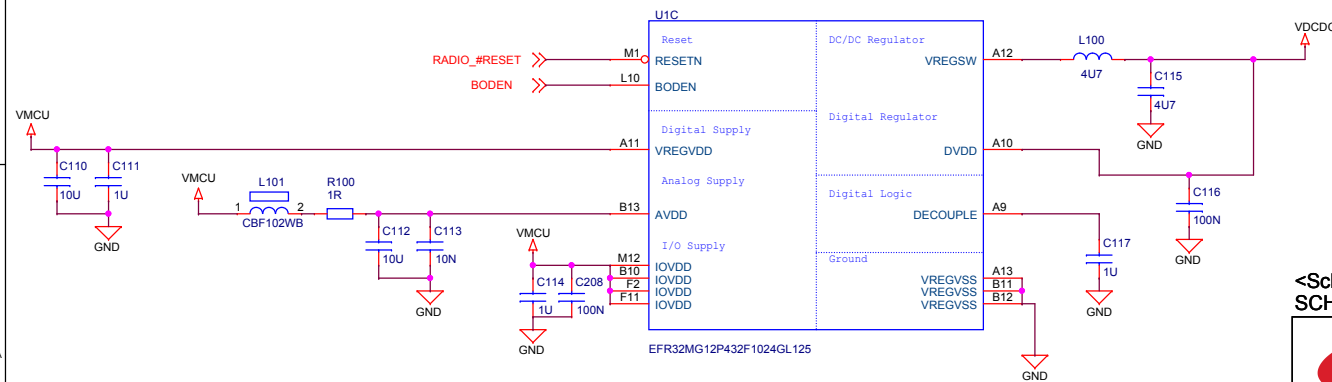
<Schematic Path> SCHEMATIC1

 SILICON LABS		Schematic Title	
		EFR32MG12 2.4 GHz Radio Board	
Designed: TAB	Approved: <OrgAddr2>	Page Title	
Size A3		Title Page	
BOM Doc No: <Cage Code>	Document number		Revision
Design Created Date: Monday, April 02, 2012	BRD4161A		A03
Sheet Created Date Monday, April 02, 2012		Sheet Modified Date Friday, October 20, 2017	Sheet 1 of 4

Antenna & Radio Interface

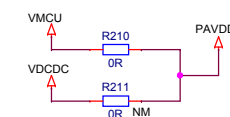


Power & Decoupling

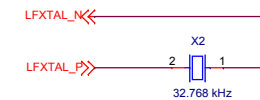


PAVDD Configuration

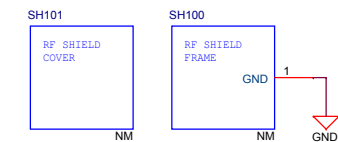
	Power Config 1 VMCU to PAVDD	Power Config DCDC to PAVDD
R210	Mount	Not mount
R211	Not mount	Mount



Low Frequency Crystal



RF Shielding



<Schematic Path>
SCHEMATIC1



Designed:	Approved:
-----------	-----------

Size A3	BOM Doc No: <Cage Code>
------------	----------------------------

Design Created Date:
Monday, April 02, 2012

	Schematic Title
1	1.1
2	2.1
3	3.1
4	4.1
5	5.1
6	6.1
7	7.1
8	8.1
9	9.1
10	10.1
11	11.1
12	12.1
13	13.1
14	14.1
15	15.1
16	16.1
17	17.1
18	18.1
19	19.1
20	20.1
21	21.1
22	22.1
23	23.1
24	24.1
25	25.1
26	26.1
27	27.1
28	28.1
29	29.1
30	30.1
31	31.1
32	32.1
33	33.1
34	34.1
35	35.1
36	36.1
37	37.1
38	38.1
39	39.1
40	40.1
41	41.1
42	42.1
43	43.1
44	44.1
45	45.1
46	46.1
47	47.1
48	48.1
49	49.1
50	50.1
51	51.1
52	52.1
53	53.1
54	54.1
55	55.1
56	56.1
57	57.1
58	58.1
59	59.1
60	60.1
61	61.1
62	62.1
63	63.1
64	64.1
65	65.1
66	66.1
67	67.1
68	68.1
69	69.1
70	70.1
71	71.1
72	72.1
73	73.1
74	74.1
75	75.1
76	76.1
77	77.1
78	78.1
79	79.1
80	80.1
81	81.1
82	82.1
83	83.1
84	84.1
85	85.1
86	86.1
87	87.1
88	88.1
89	89.1
90	90.1
91	91.1
92	92.1
93	93.1
94	94.1
95	95.1
96	96.1
97	97.1
98	98.1
99	99.1
100	100.1

EFR32MG12 2.4 GHz Radio Board

Page Title

	RF, Antenna & Power
--	--------------------------------

Document number
BRD4161A

Sheet Created Date
Monday, April 02, 2012

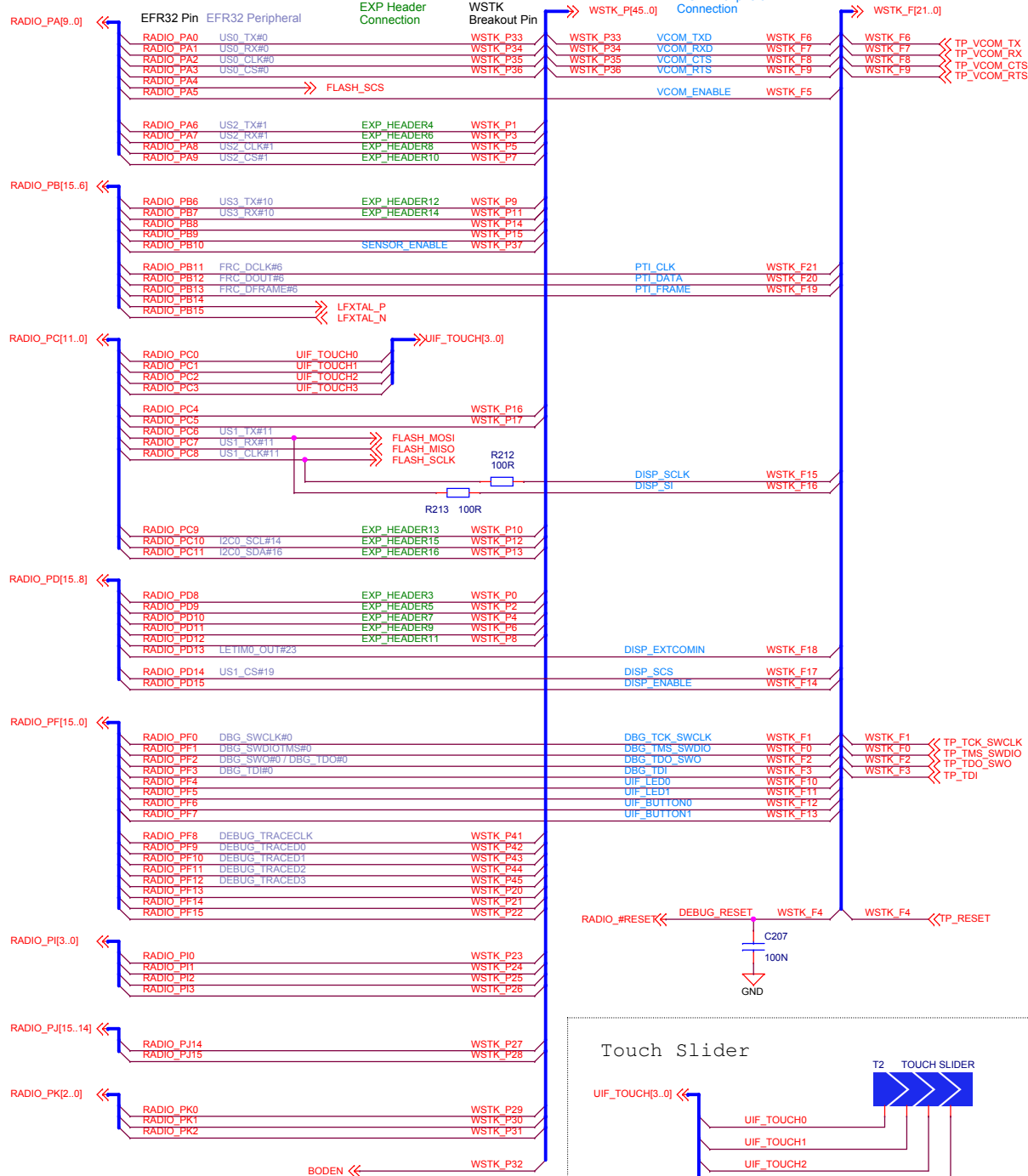
Revision
A03

Sheet Modified Date	Friday, October 20, 2017
---------------------	--------------------------

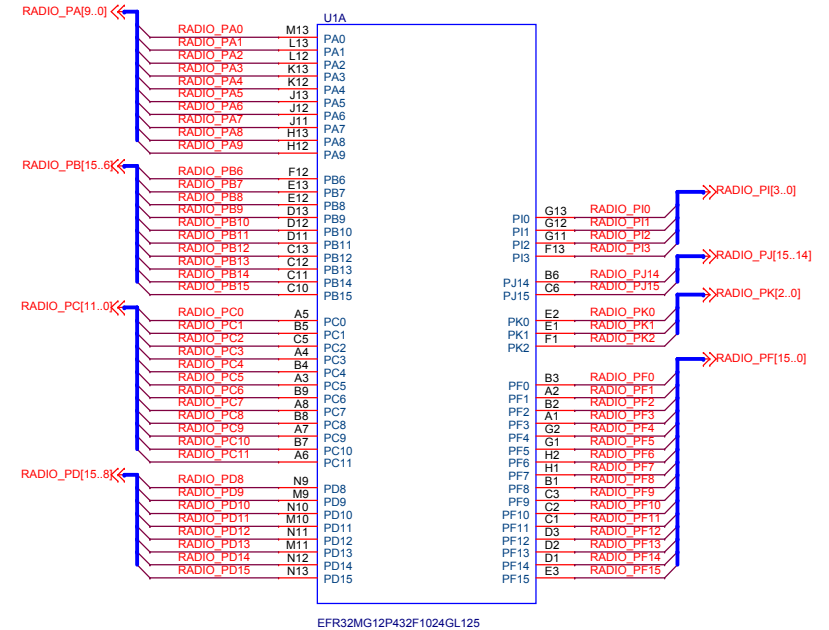
Revision
A03

Sheet
2 of 4

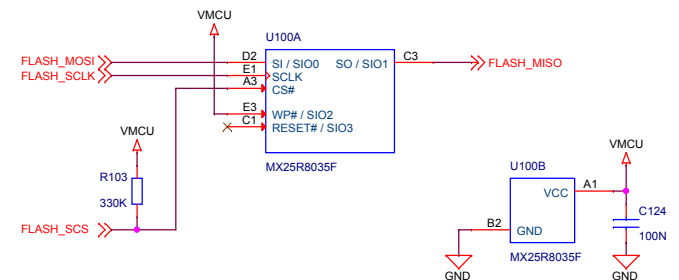
EFR32 Pin Mapping



EFR32 I/O Port Pins



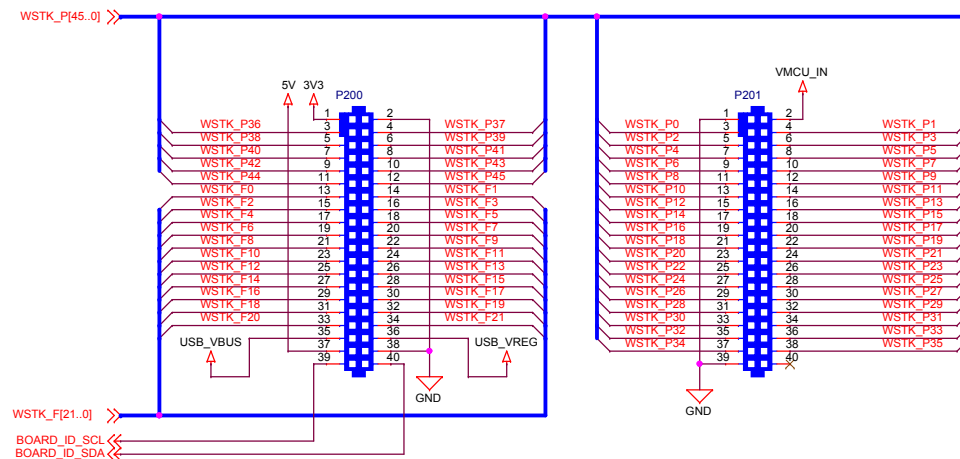
Serial Flash



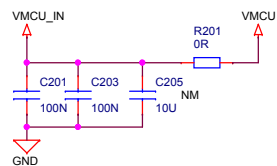
<Schematic Path> SCHEMATIC1

		Schematic Title	
EFR32MG12 2.4 GHz Radio Board		Page Title	
EFR32 I/O Port Connections		Document number	
BRD4161A		Revision	
A03		Sheet	
3 of 4		Sheet Created Date	
Monday, April 02, 2012		Sheet Modified Date	
Wednesday, April 11, 2012		Sheet Modified Date	
Friday, October 20, 2017		Sheet	
3 of 4		Sheet	
3 of 4		Sheet	

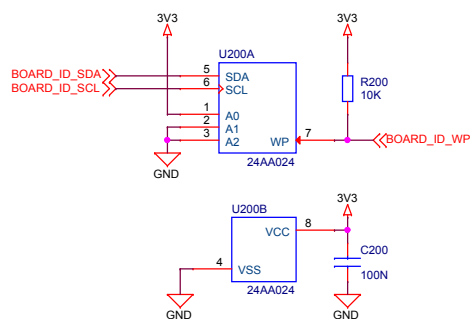
WSTK Connectors



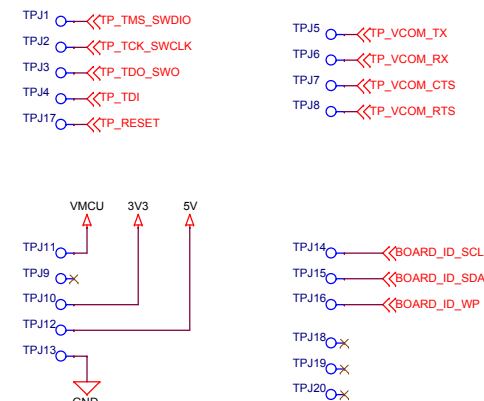
WSTK Power Decoupling




Board Identification



Test Points



<Schematic Path>
SCHEMATIC1

		Schematic Title	
		EFR32MG12 2.4 GHz Radio Board	
Designed: TAB		Page Title	
Size A3		WSTK Connectors & Board ID	
BOM Doc No: <Cage Code>		Document number	Revision
Design Created Date: Monday, April 02, 2012		BRD4161A	A03
Approved: <OrgAddr2>		Sheet Created Date Tuesday, April 03, 2012	Sheet Modified Date Friday, October 20, 2017
		Sheet 4	of 4