



EFR32 Mighty Gecko Radio Board

2.4 GHz / 868 MHz 10 dBm, VDCDC 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.

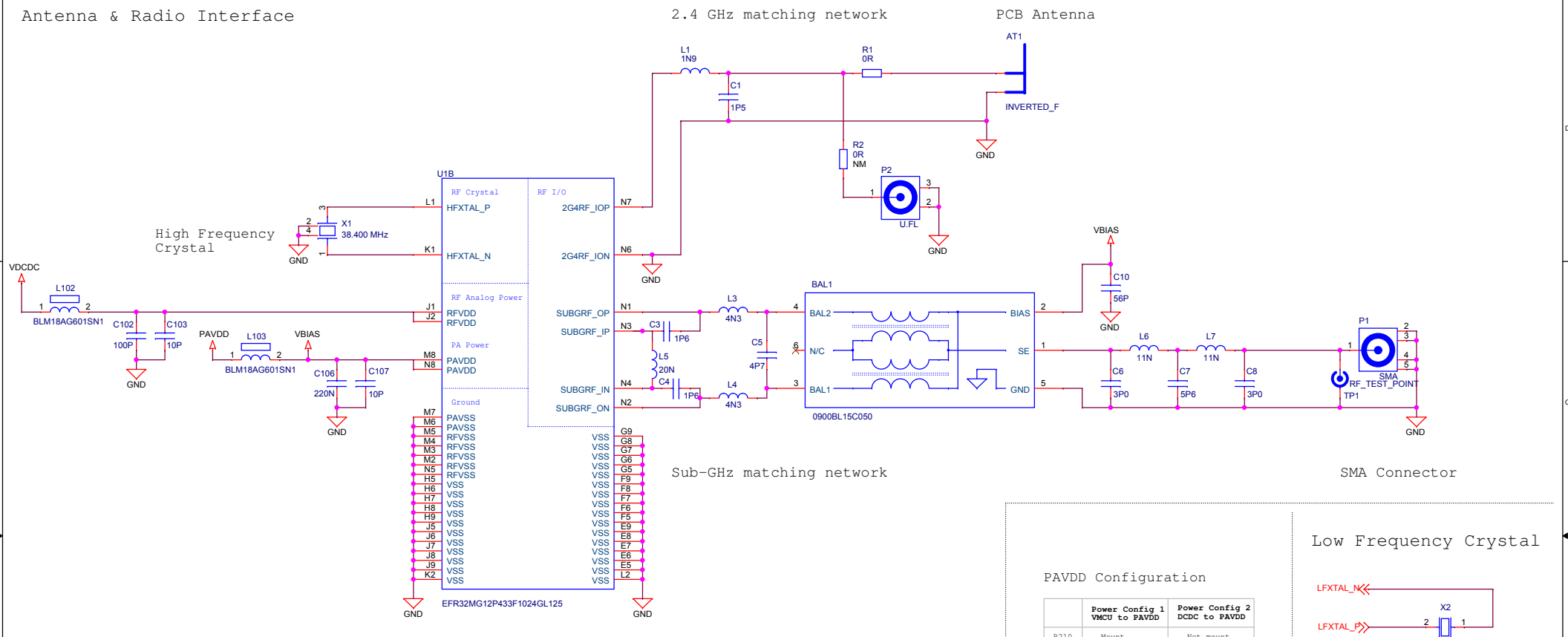


| Revision History | |
|------------------|---|
| Rev. | Description |
| A00 | Initial version. |
| A01 | Updated EFR32 chip revision and 32 kHz crystal part number. |
| A02 | Fixing EFR32 pin names; Updated PCB revision. |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

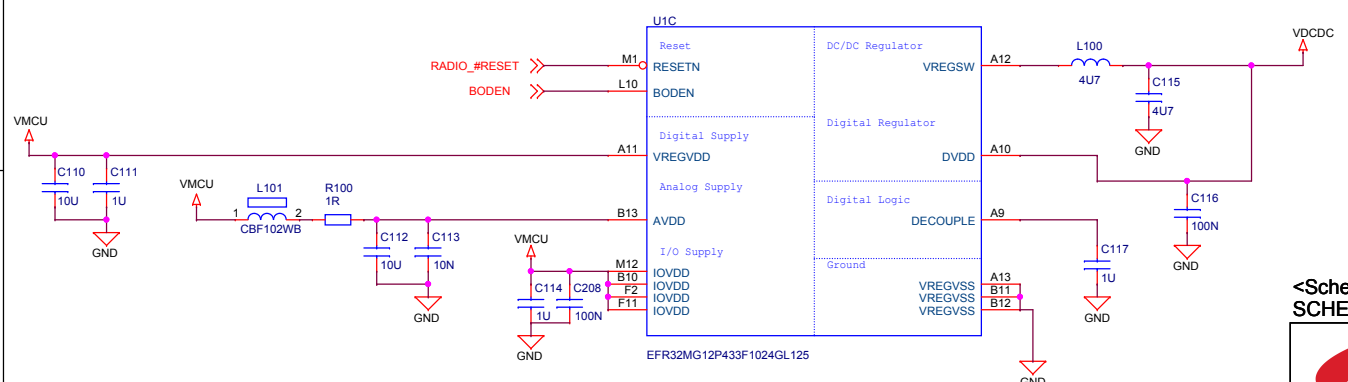
<Schematic Path>
 SCHEMATIC1

| | | | |
|--|----------------------------|---|---|
| | | Schematic Title | |
| | | EFR32MG12 Dual Band 2400/868 MHz Radio | |
| Designed: TAB Approved: <OrgAddr2> | | Page Title | |
| | | Title Page | |
| Size A3 | BOM Doc No: <Cage Code> | Document number BRD4163A | Revision A02 |
| Design Created Date: Monday, April 02, 2012 | | Sheet Created Date Monday, April 02, 2012 | Sheet Modified Date Friday, January 20, 2017 |
| | | Sheet 1 of 4 | |

Antenna & Radio Interface

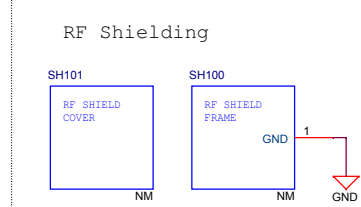
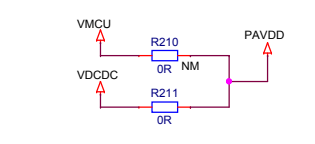
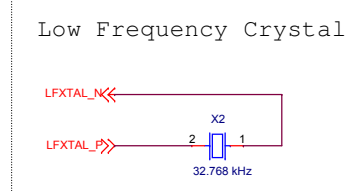


Power & Decoupling



PAVDD Configuration

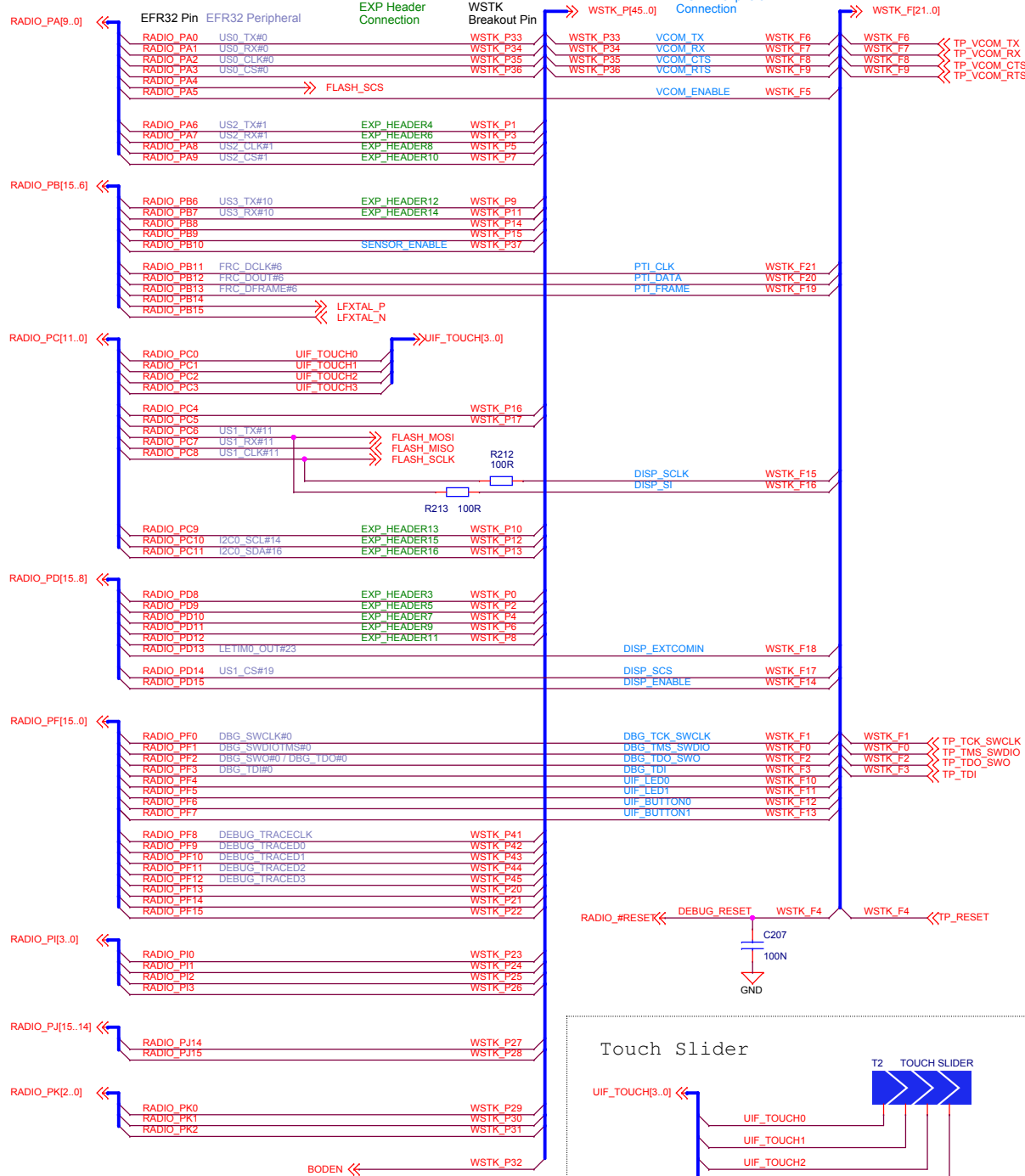
| | Power Config 1 VMCU to PAVDD | Power Config 2 DCDC to PAVDD |
|------|---------------------------------|---------------------------------|
| R210 | Mount | Not mount |
| R211 | Not mount | Mount |



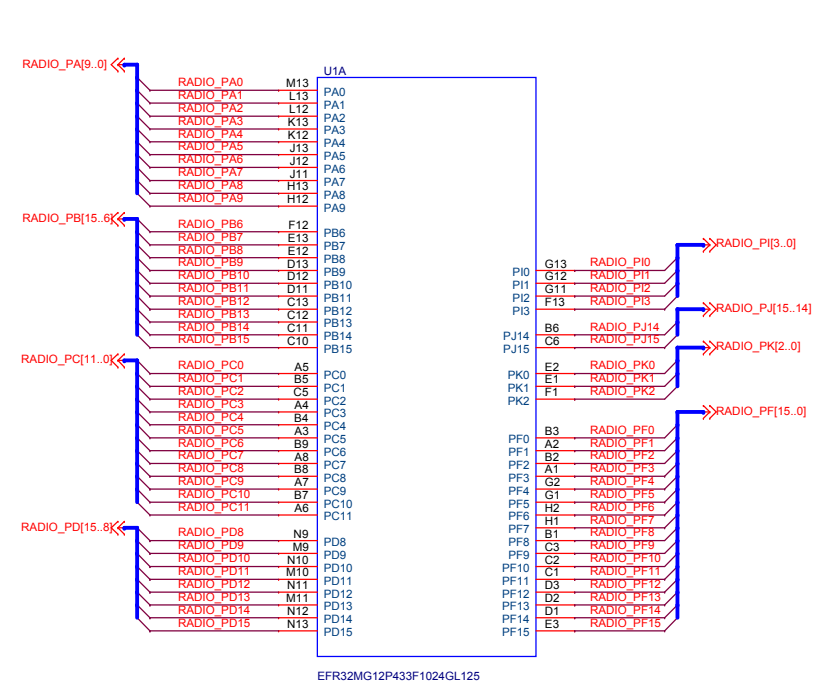
<Schematic Path>
SCHEMATIC1

| | | | |
|---|---|--|--------------|
| <p>SILICON LABS</p> | | Schematic Title | |
| | | EFR32MG12 Dual Band 2400/868 MHz Radio Bo | |
| Designed: TAB | | Page Title | |
| Approved: <OrgAddr2> | | RF, Antenna & Power | |
| Size: A3 | BOM Doc No: <Cage Code> | Document number | Revision |
| Design Created Date: Monday, April 02, 2012 | Sheet Created Date: Monday, April 02, 2012 | BRD4163A | A02 |
| | Sheet Modified Date: Friday, January 20, 2017 | | Sheet 2 of 4 |

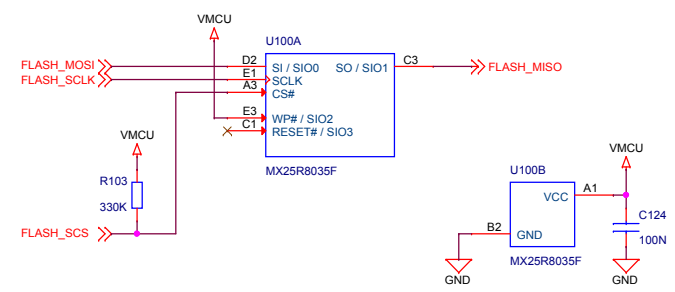
EFR32 Pin Mapping



EFR32 I/O Port Pins



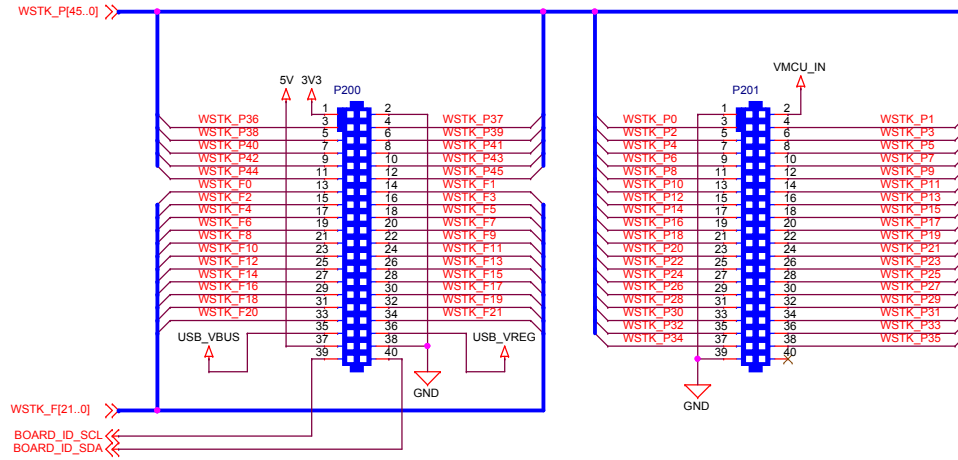
Serial Flash



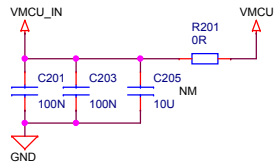
<Schematic Path> SCHEMATIC1

| | | | |
|--|--|--|------------|
| | | Schematic Title | |
| | | EFR32MG12 Dual Band 2400/868 MHz Radio Bo | |
| Designed: TAB Size: A3 Design Created Date: Monday, April 02, 2012 | | Page Title | |
| | | EFR32 I/O Port Connections | |
| Approved: <OrgAddr2> | | Document number | Revision |
| BOM Doc No: <Cage Code> | | BRD4163A | A02 |
| Sheet Created Date: Wednesday, April 11, 2012 | | Sheet Modified Date | Sheet |
| Friday, January 20, 2017 | | 3 | of 4 |

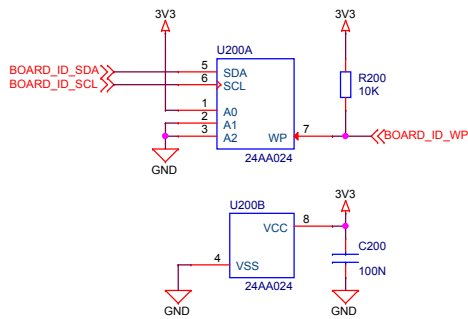
WSTK Connectors



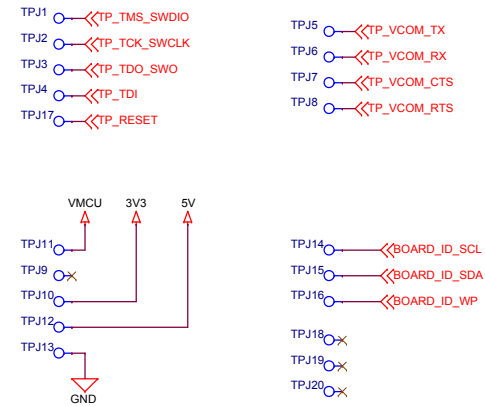
WSTK Power Decoupling



Board Identification



Test Points



<Schematic Path>
SCHEMATIC1

| | | | |
|--|--|--|--------------|
| | | Schematic Title | |
| | | EFR32MG12 Dual Band 2400/868 MHz Radio Bo | |
| Designed: TAB Size: A3 Design Created Date: Monday, April 02, 2012 | | Page Title | |
| | | WSTK Connectors & Board ID | |
| Approved: <OrgAddr2> | | Document number | Revision |
| BOM Doc No: <Cage Code> | | BRD4163A | A02 |
| Sheet Created Date: Tuesday, April 03, 2012 | | Sheet Modified Date: Friday, January 20, 2017 | Sheet 4 of 4 |