



## EFR32 Mighty Gecko Radio Board

2.4 GHz / 868-915 MHz 19 dBm, VMCU to PAVDD

| Board Function             | Page |
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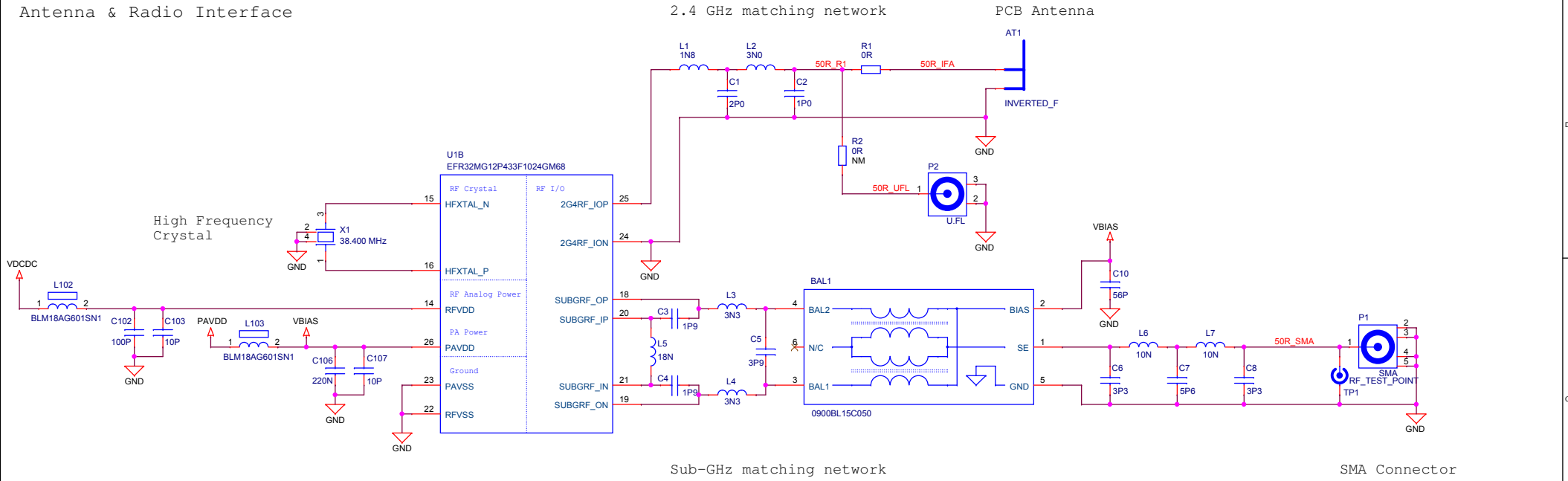


| Revision History |                   |
|------------------|-------------------|
| Rev.             | Description       |
| A00              | Initial revision. |
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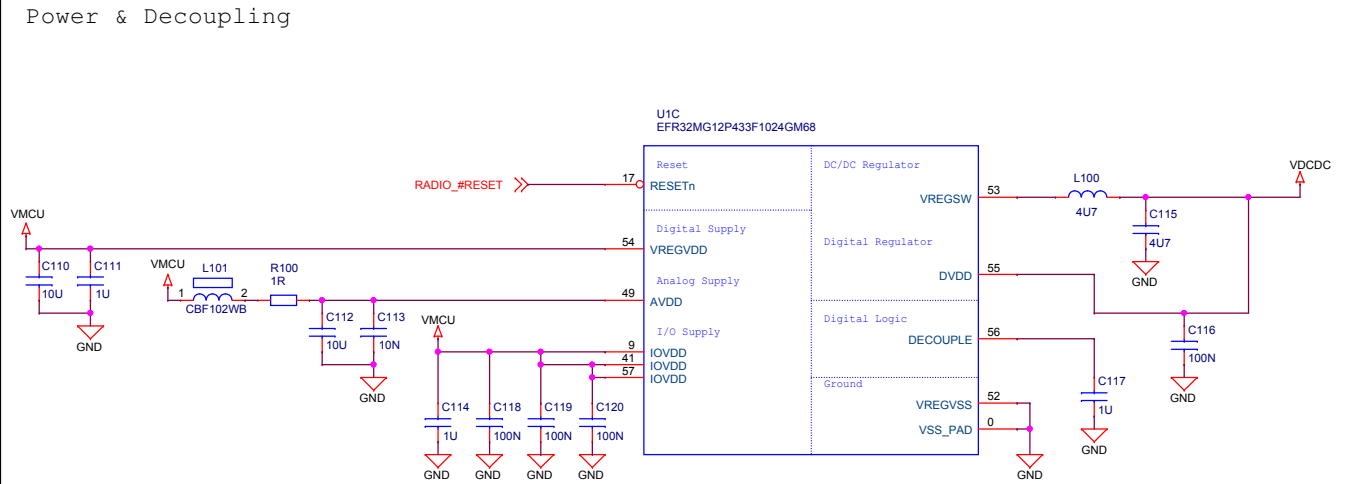
<Schematic Path>  
 SCHEMATIC1

|  |                            |  |                 |
|--|----------------------------|--|-----------------|
|  |                            | Schematic Title                              |                 |
|  |                            | <b>EFR32MG12 WSTK Radio Board</b>            |                 |
| Designed: TAB      Approved: DDB               |                            | Page Title                                   |                 |
|  |                            | <b>Title Page</b>                            |                 |
| Size<br>A3                                     | BOM Doc No:<br><Cage Code> | Document number                              | Revision        |
| Design Created Date:<br>Monday, April 02, 2012 |                            | BRD4170A                                     | A00             |
| Sheet Created Date<br>Monday, April 02, 2012   |                            | Sheet Modified Date<br>Friday, July 28, 2017 | Sheet<br>1 of 4 |

# Antenna & Radio Interface

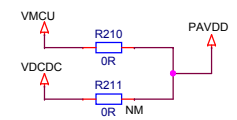


# Power & Decoupling

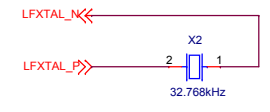


## PAVDD Configuration

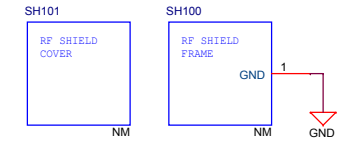
|      | Power Config 1<br>VMCU to PAVDD | Power Config 2<br>DCDC to PAVDD |
|------|---------------------------------|---------------------------------|
| R210 | Mount                           | Not mount                       |
| R211 | Not mount                       | Mount                     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



# Low Frequency Crystal



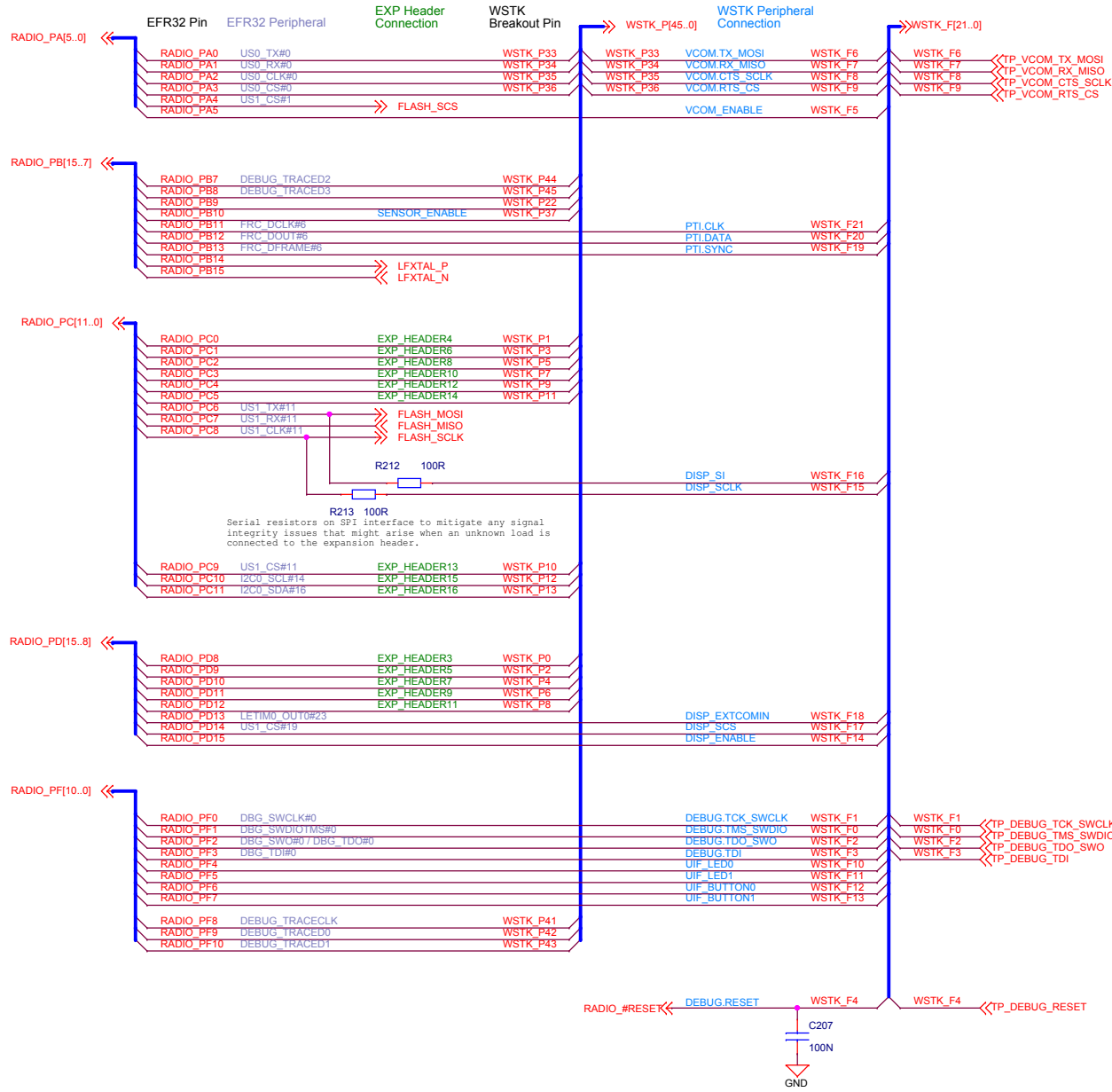
# RF Shielding



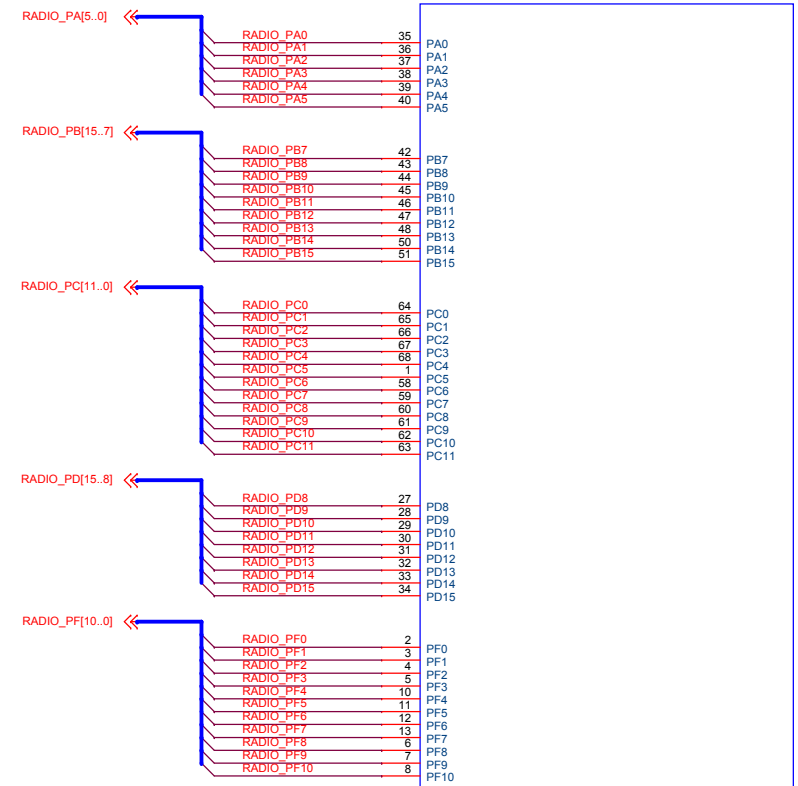
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SCHEMATIC1

|   |  |                                   |                      |
|---|--|-----------------------------------|----------------------|
|   |  | Schematic Title                   |                      |
|   |  | <b>EFR32MG12 WSTK Radio Board</b> |                      |
| Designed: TAB<br>Approved: DDB              |  | Page Title                        |                      |
|   |  | <b>RF, Antenna &amp; Power</b>    |                      |
| Size: A3                                    | BOM Doc No: <Cage Code>                    | Document number                   | Revision             |
| Design Created Date: Monday, April 02, 2012 | Sheet Created Date: Monday, April 02, 2012 | Document number: <b>BRD4170A</b>  | Revision: <b>A00</b> |
|   | Sheet Modified Date: Friday, July 28, 2017 |                                   | Sheet 2 of 4         |

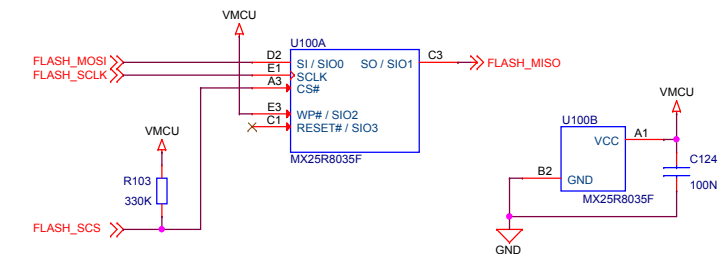
# EFR32 Pin Mapping



# EFR32 I/O Port Pins



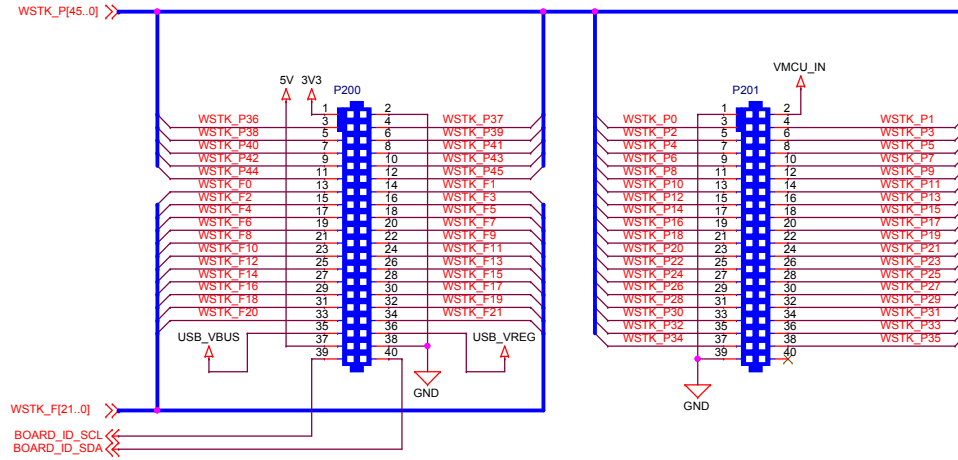
# Serial Flash



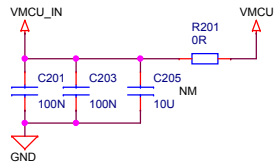
# <Schematic Path> SCHEMATIC1

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|   |   | Schematic Title                   |              |
|   |   | <b>EFR32MG12 WSTK Radio Board</b> |              |
| Designed: TAB<br>Approved: DDB              |   | Page Title                        |              |
|   |   | <b>EFR32 I/O Port Connections</b> |              |
| Size: A3                                    | BOM Doc No: <Cage Code>                       | Document number                   | Revision     |
| Design Created Date: Monday, April 02, 2012 | Sheet Created Date: Wednesday, April 11, 2012 | BRD4170A                          | A00          |
|   | Sheet Modified Date: Friday, July 28, 2017    |                                   | Sheet 3 of 4 |

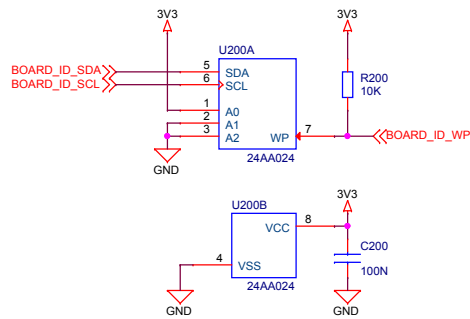
# WSTK Connectors



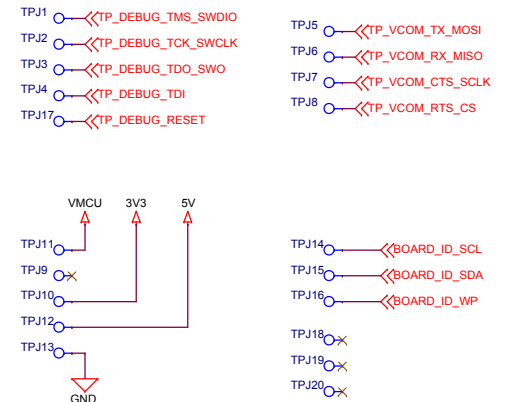
## WSTK Power Decoupling



## Board Identification



## Test Points



<Schematic Path>  
SCHEMATIC1

|  |  |                                       |  |
|--|--|---------------------------------------|--|
|  |  | Schematic Title                       |  |
|  |  | <b>EFR32MG12 WSTK Radio Board</b>     |  |
| Designed: TAB<br>Size: A3<br>Design Created Date: Monday, April 02, 2012 |  | Page Title                            |  |
|  |  | <b>WSTK Connectors &amp; Board ID</b> |  |
| Approved: DDB<br>BOM Doc No: <Cage Code>                                 |  | Document number                       |  |
|  |  | <b>BRD4170A</b>                       |  |
| Sheet Created Date: Tuesday, April 03, 2012                              |  | Revision<br><b>A00</b>                |  |
| Sheet Modified Date: Friday, July 28, 2017                               |  | Sheet<br>4 of 4                       |  |