



## EFR32xG27 Radio Board

2.4 GHz 8 dBm

| Board Function | Page |
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|----------------|------|

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## Revision History

| Rev. | Description |
|------|-------------|
|------|-------------|

|     |                                           |
|-----|-------------------------------------------|
| A00 | Initial release, without U1 and matching. |
|-----|-------------------------------------------|

|     |                                       |
|-----|---------------------------------------|
| A01 | Release without U1 but with matching. |
|-----|---------------------------------------|

|     |           |
|-----|-----------|
| A02 | Added U1. |
|-----|-----------|

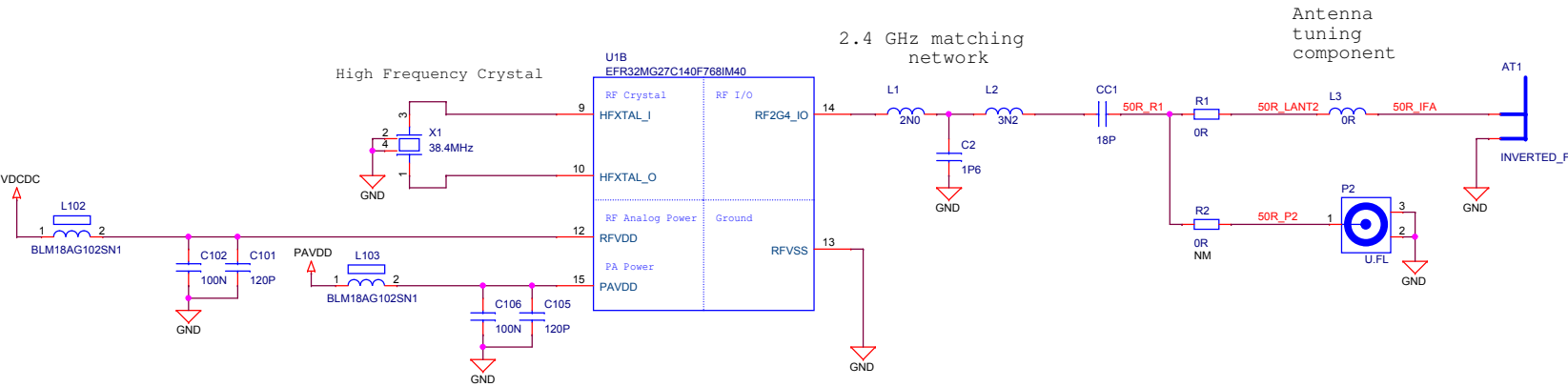
|     |                                   |
|-----|-----------------------------------|
| A03 | U1 with additional factory calcs. |
|-----|-----------------------------------|

|     |                                   |
|-----|-----------------------------------|
| A04 | U1 with additional factory tests. |
|-----|-----------------------------------|

|     |                                     |
|-----|-------------------------------------|
| A05 | Updated matching values and layout. |
|-----|-------------------------------------|

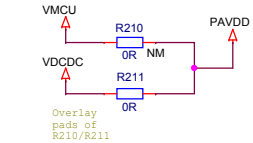
|                                                                                                              |                                                 |                                                                                    |                        |
|--------------------------------------------------------------------------------------------------------------|-------------------------------------------------|------------------------------------------------------------------------------------|------------------------|
| <br><b>SILICON LABS</b> |                                                 | Board Name<br><b>EFR32xG27 2.4 GHz 8 dBm Radio Board</b>                           |                        |
|                                                                                                              |                                                 | Page Title<br><b>Title Page</b>                                                    |                        |
| Designed<br>SZL                                                                                              | Approved<br>RGU                                 | Board Number<br><b>BRD4194A</b>                                                    | Revision<br><b>A05</b> |
| Size<br>A3                                                                                                   | Sheet Modified Date<br>Monday, October 24, 2022 | Copyright Silicon Laboratories Inc. 2020    CONFIDENTIAL – SUBJECT TO TERMS OF USE |                        |
|                                                                                                              |                                                 | Sheet<br>1 of 4                                                                    |                        |

Antenna & Radio Interface

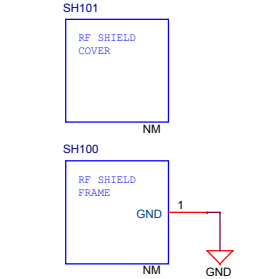


PAVDD Configuration

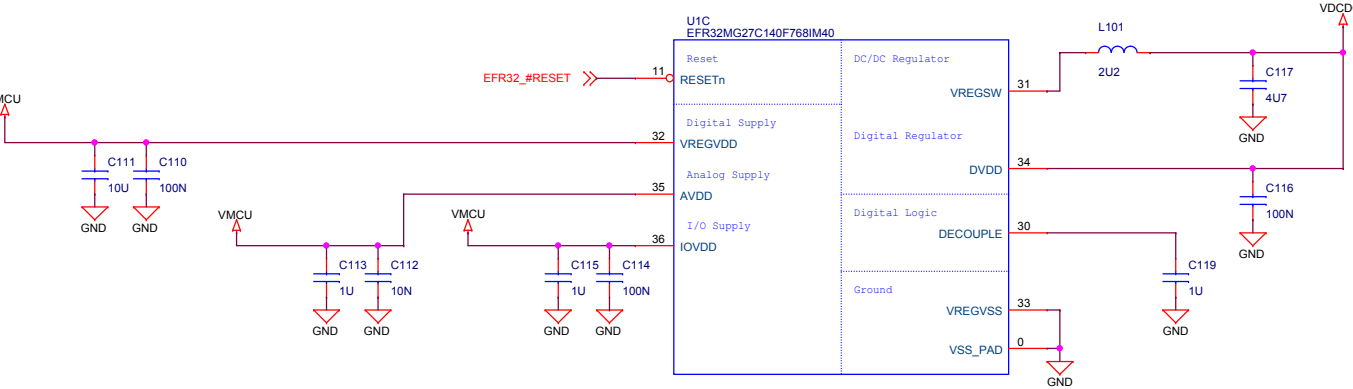
|      | Power Config 1<br>VMCU to PAVDD | Power Config 2<br>DCDC to PAVDD |
|------|---------------------------------|---------------------------------|
| R210 | Mount                           | Not mount                       |
| R211 | Not mount                       | Mount                     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



RF Shielding



Power & Decoupling





**SILICON LABS**

Designed SZL Approved RGU

Size A3 Sheet Modified Date Monday, October 24, 2022

Board Name

**EFR32xG27 2.4 GHz 8 dBm Radio Board**

Page Title

**RF, Antenna and Power**

Board Number

**BRD4194A**

Revision

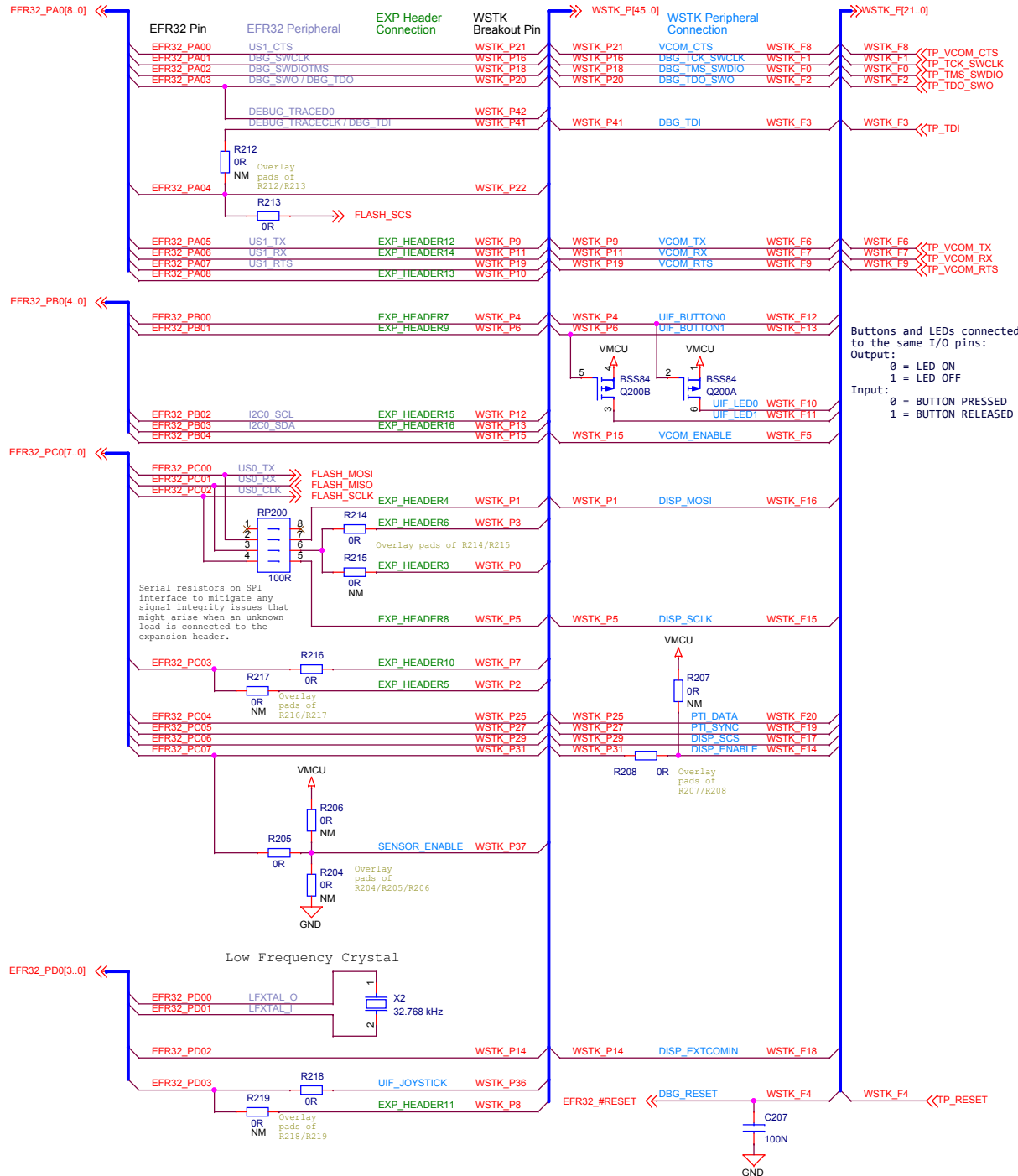
**A05**

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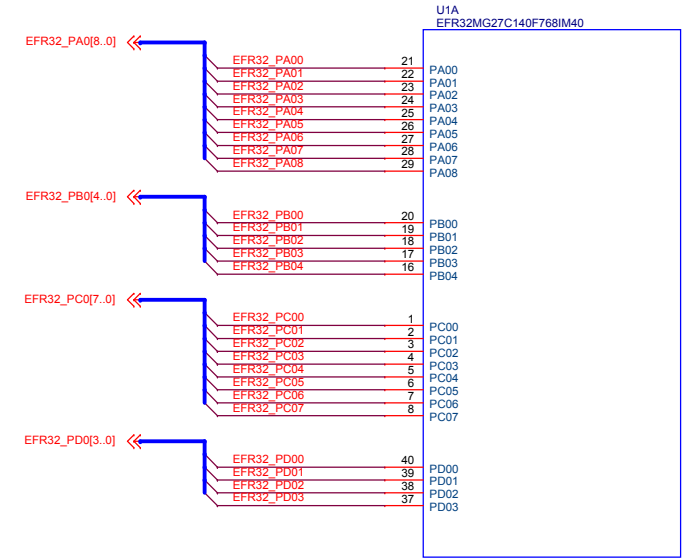
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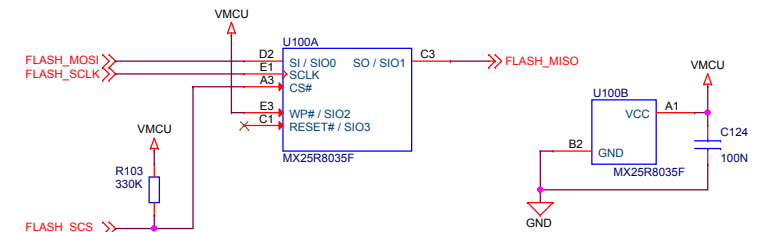
## EFR32 Pin Mapping



## EFR32 I/O Port Pins

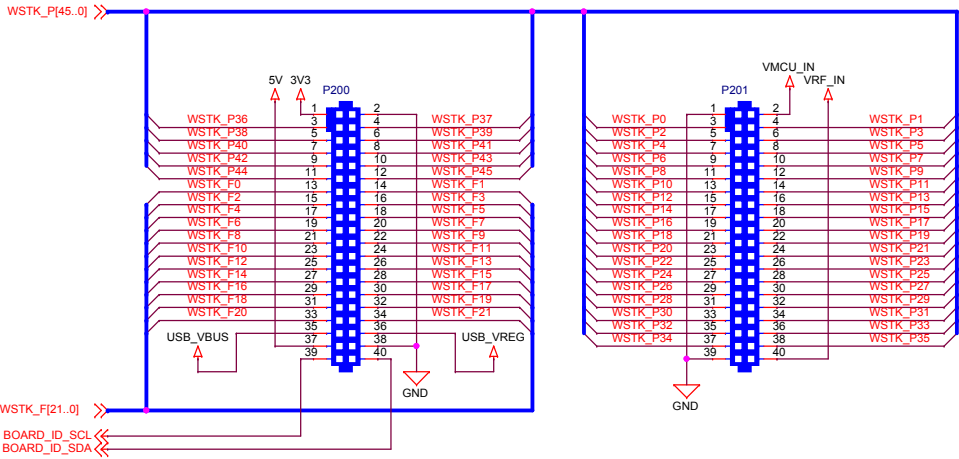


## Serial Flash

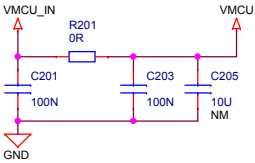


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|------------------------------------------|-------------------------------------------------|--------------------------------------------|----------------------------------------|
|                                          |                                                 | Board Name                                 |                                        |
|                                          |                                                 | <b>EFR32xG27 2.4 GHz 8 dBm Radio Board</b> |                                        |
| <b>SILICON LABS</b>                      |                                                 | Page Title                                 |                                        |
|                                          |                                                 | <b>I/O Port Connections</b>                |                                        |
| Designed<br>SZL                          | Approved<br>RGU                                 | Board Number                               | Revision                               |
| Size<br>A3                               | Sheet Modified Date<br>Monday, October 24, 2022 | <b>BRD4194A</b>                            | <b>A05</b>                             |
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|                                          |                                                 |                                            | Sheet<br>3 of 4                        |

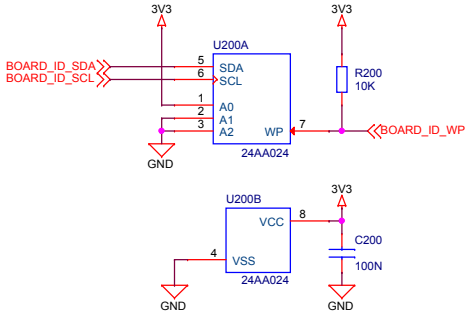
WSTK Connectors



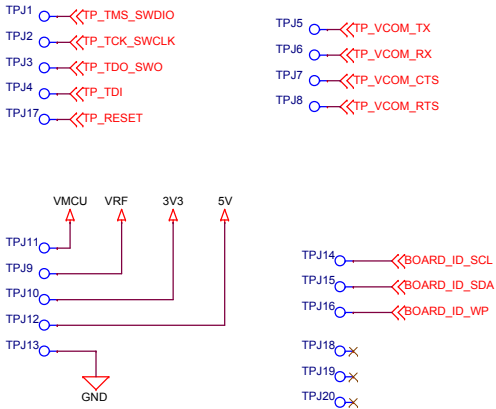
WSTK Power Decoupling



Board Identification



Test Points



|                                          |  |                                                 |  |                                        |  |
|------------------------------------------|--|-------------------------------------------------|--|----------------------------------------|--|
| Designed<br>SZL                          |  | Approved<br>RGU                                 |  | WSLK Connectors & Board ID             |  |
| Size<br>A3                               |  | Sheet Modified Date<br>Monday, October 24, 2022 |  | Board Number<br>BRD4194A               |  |
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