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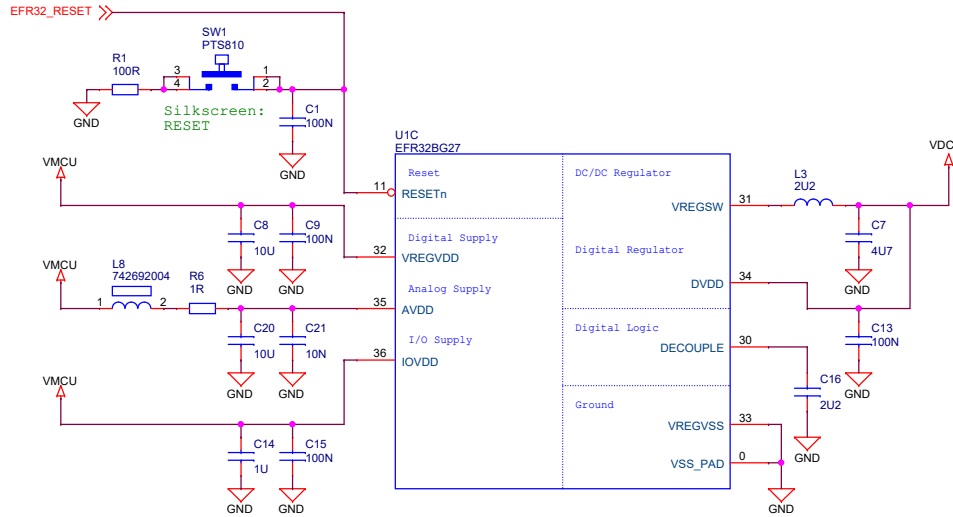
| EFR32BG27 +8 dBm DK | |
|---------------------------|------|
| Board Function | Page |
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| EFR32BG27 | 2 |
| Sensors and Peripherals | 3 |
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| On-board Debugger | 5 |

| Revision History | |
|------------------|--------------------------|
| Rev. | Description |
| A00 | Initial Release |
| A01 | Updated matching network |

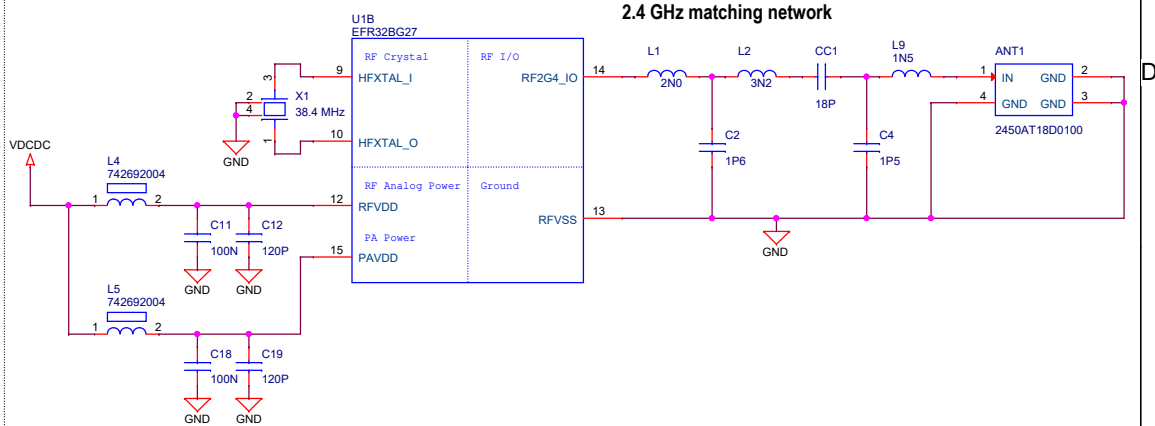
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|--|--|--------------------------|--|
| | | Board Name | |
| | | EFR32BG27 +8 dBm DK | |
| Designed PEP | | Approved RGU | |
| Size A3 | Sheet Modified Date Thursday, November 24, 2022 | Board Number BRD2602A | |
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| | | Sheet 1 of 5 | |

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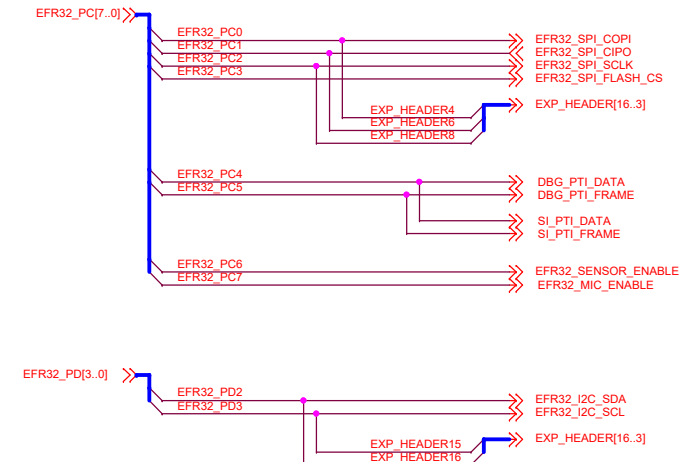
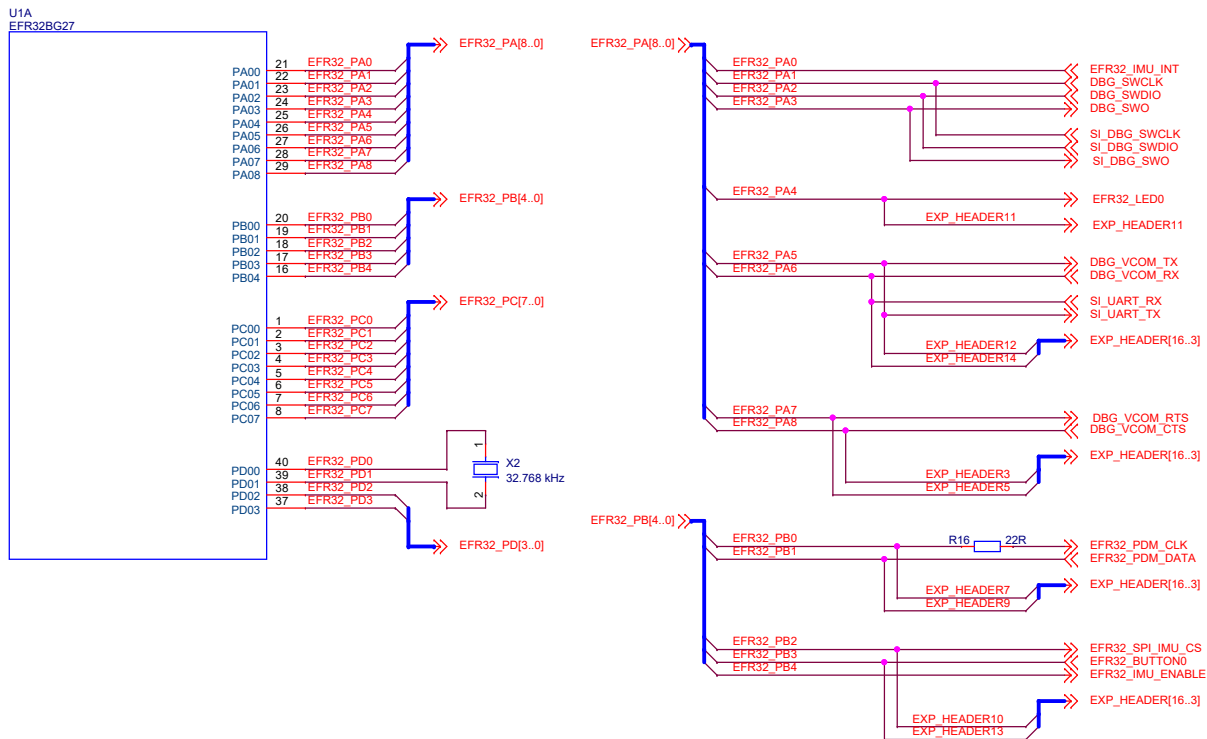
EFR32BG27 Power Section




EFR32BG27 RF Section

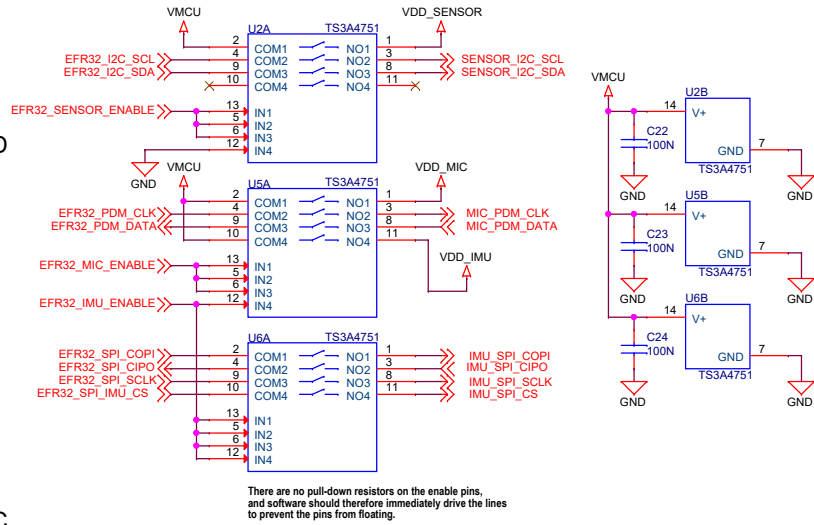


EFR32BG27 IOs & Signal Assignments

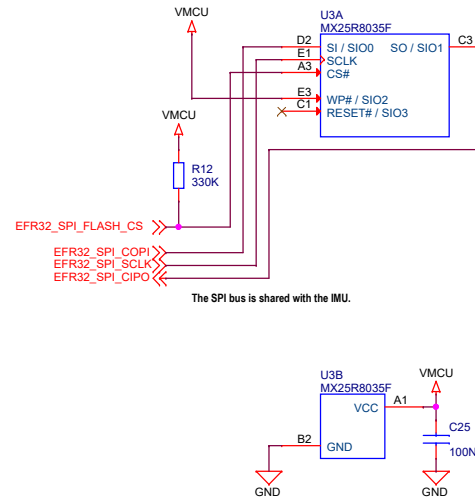


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| | | EFR32BG27 +8 dBm DK | |
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| Size A3 | Sheet Modified Date Wednesday, November 23, 2022 | BRD2602A | A01 |
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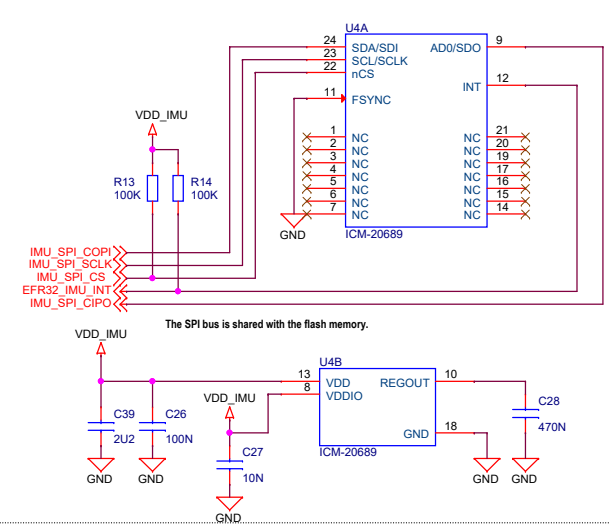
Sensor Power/Isolation



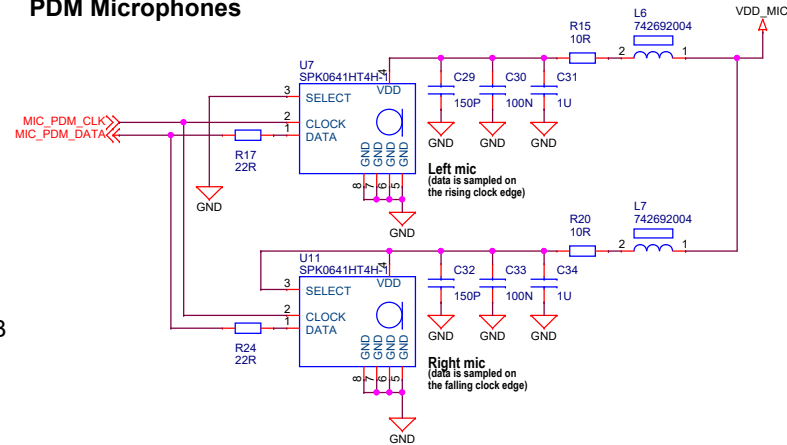
SPI Flash



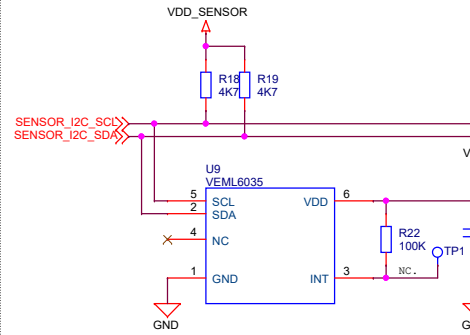
6-axis Inertial Sensor (IMU)



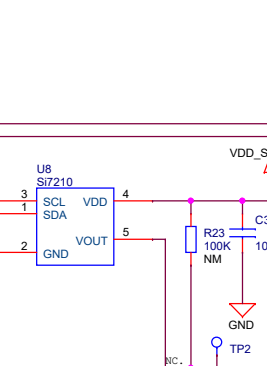
PDM Microphones



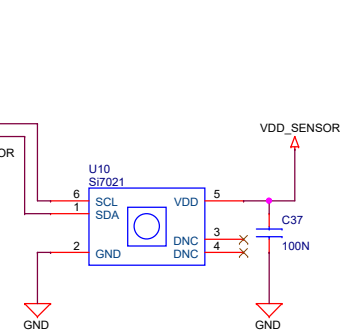
Ambient Light Sensor



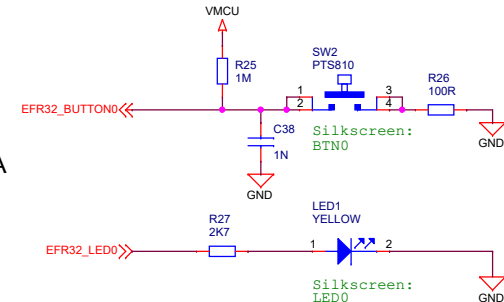
Hall-effect Sensor



RH/Temp Sensor

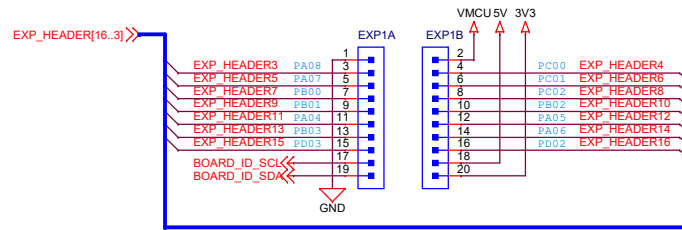



Push Button & LED



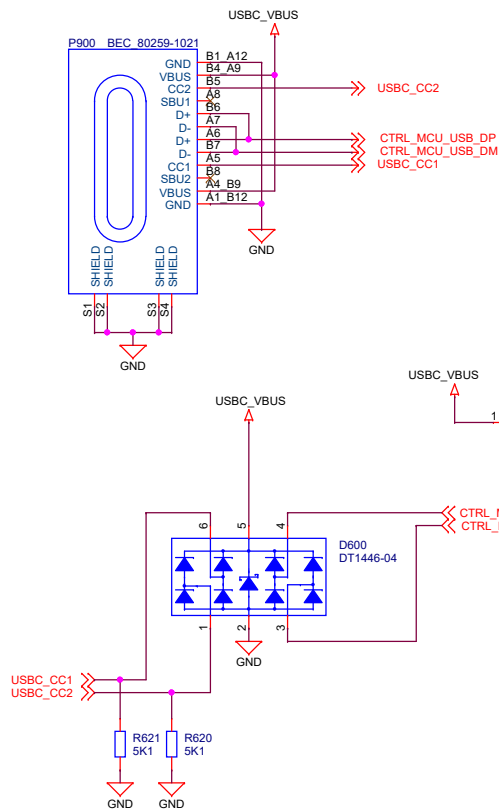
Breakout Pads - EXP Header

All signals routed to the EXP header are used on the board as well. Take care to avoid signal conflicts (see page 2 for signal assignments).

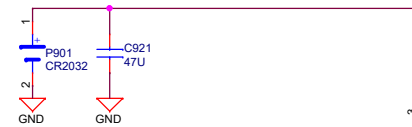


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Debug USB Connection



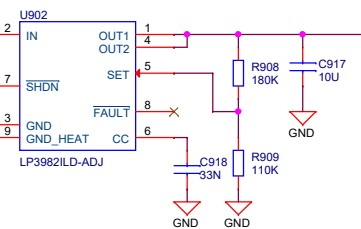
CR2032 Coin Cell Battery Holder



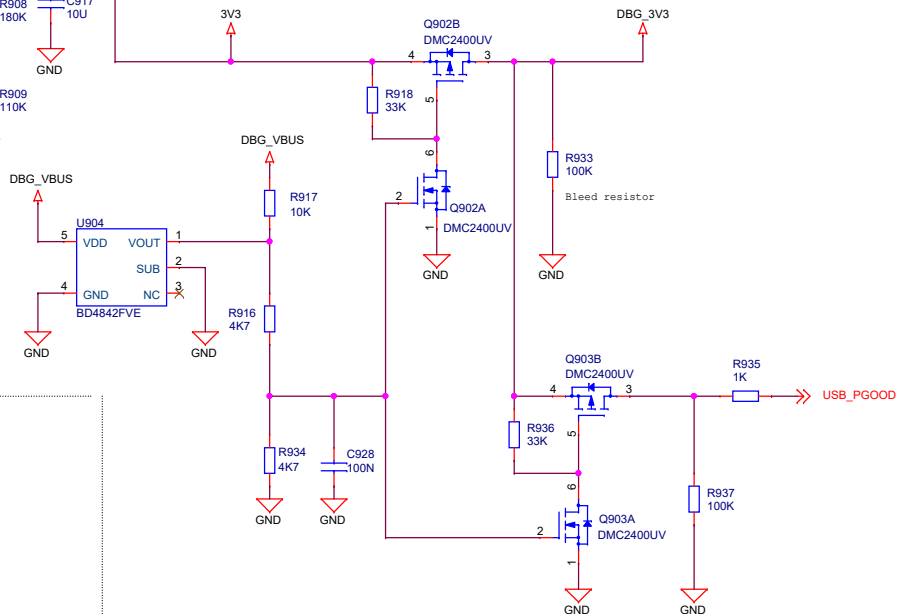
Target Voltage Domain

Q901 switches from battery power to USB when USB is plugged in. Additionally, the Mini Simplicity connector can supply power directly to the target voltage domain (VMCU) if the USB line and battery is removed.

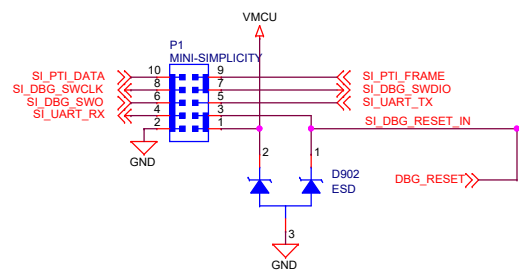
3.3 V Regulator



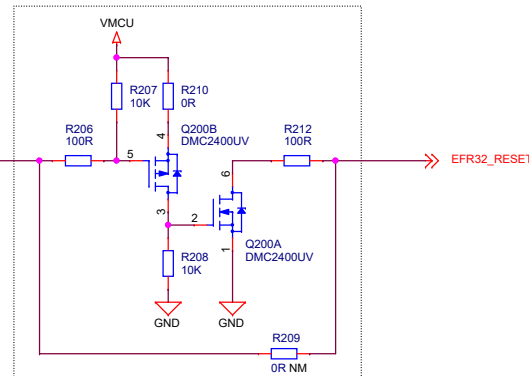
Debugger Power Isolation




Mini Simplicity Connector



Non-inverting open drain buffer



RESETn on U1 has an internal pull-up to DVDD. The purpose of this circuit is to prevent current flowing from VMCU to DVDD through this pull-up if a connected debugger has a pull-up resistor from reset to VMCU.

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