EFR32xG27 Low Cost Reference Design

For Agricultural IoT Applications

Revision History

Rev.	Description
A00	Initial release

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Designed:	Approved:
Size: A3	BOM Doc No:
Design Created Date:	Sheet Created Date: Feb 2, 2023
Sheet Modified Date:	Sheet: 1 of 3

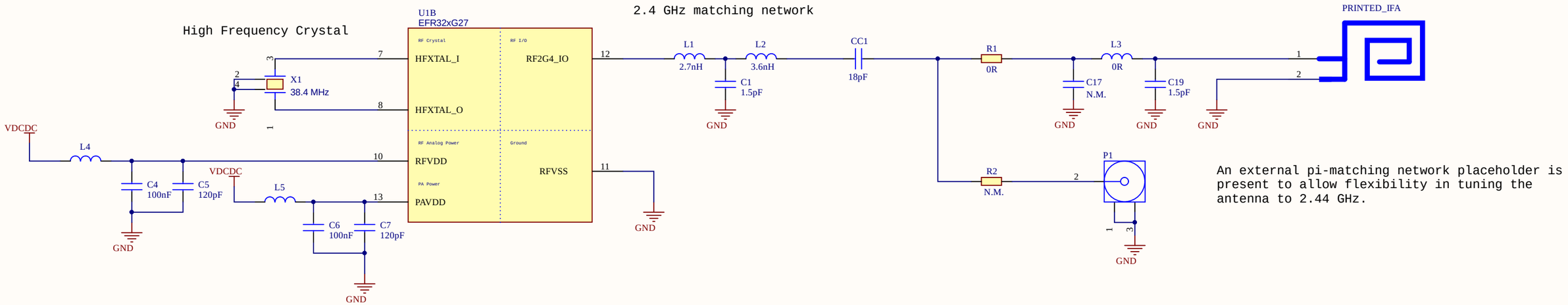
Schematic Title: **EFR32xG27 Low Cost Reference Design for Agricultural IoT Applications**

Page Title: **Title Page**

Document number: **EFR32xG27_LCRD**

Revision: **A00**

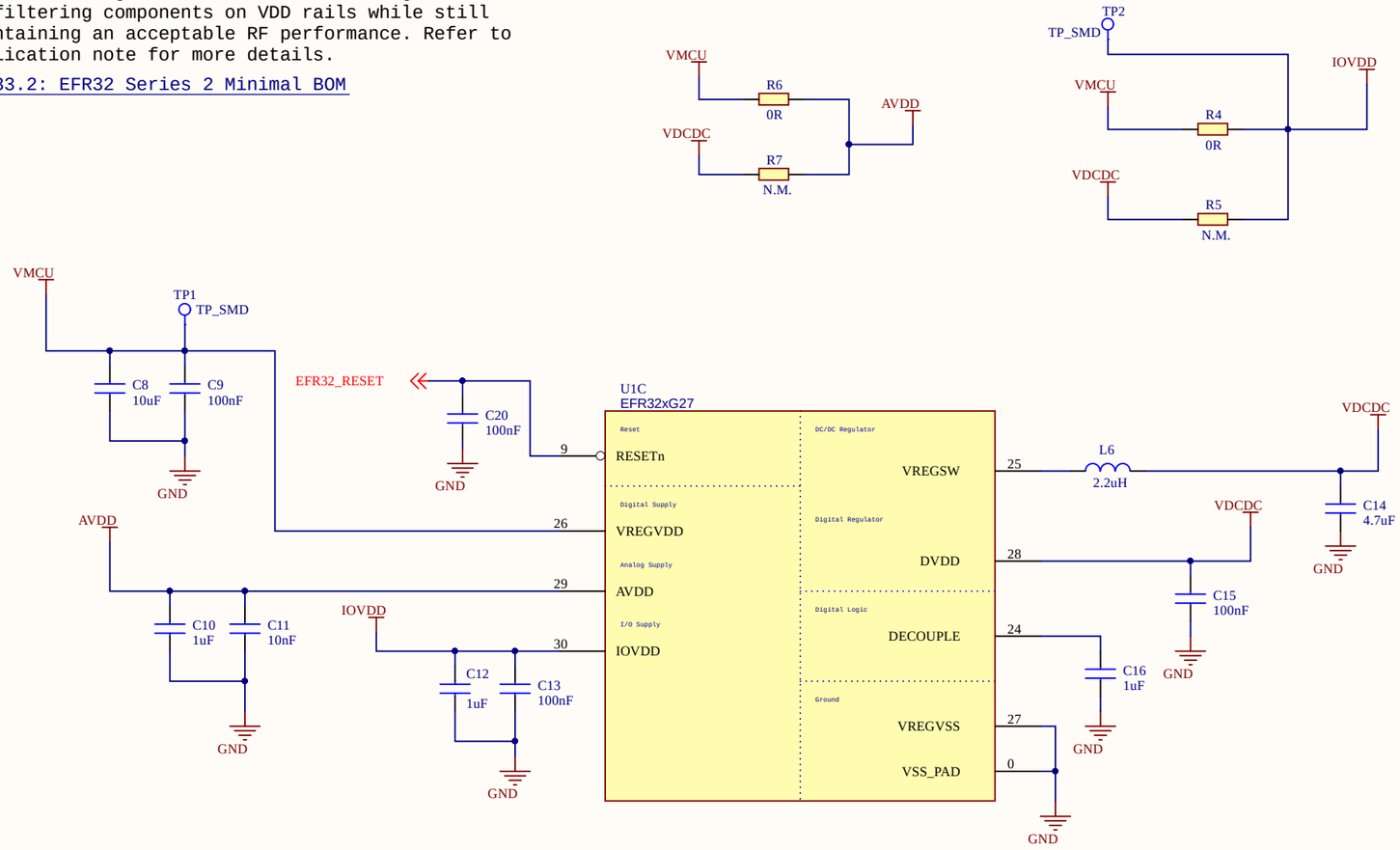
Antenna & Radio Interface



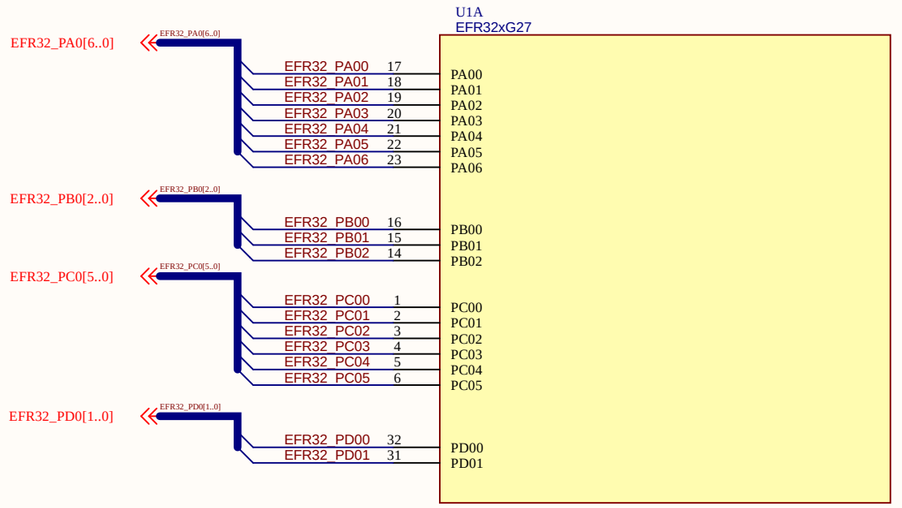
Power & Decoupling

Note: A minimal BOM solution is available for this reference design that focuses on reducing the number of filtering components on VDD rails while still maintaining an acceptable RF performance. Refer to application note for more details.

AN933.2: EFR32 Series 2 Minimal BOM



I/O Port Pins



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Schematic Title: EFR32xG27 Low Cost Reference Design for Agricultural IoT Applications

Page Title: RF, Antenna, HFXO, Power, IOs

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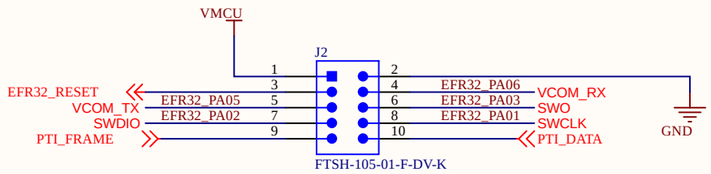
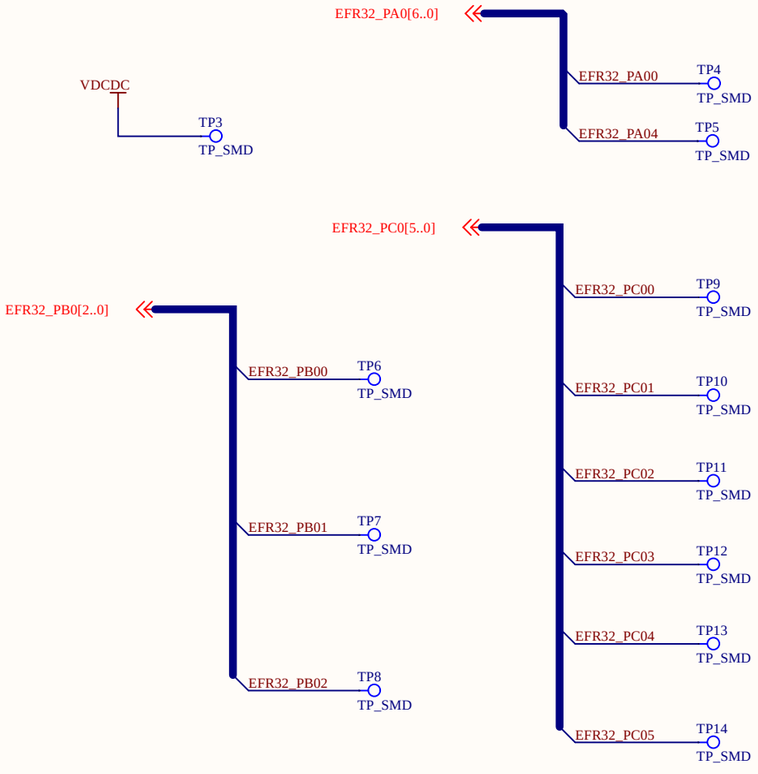
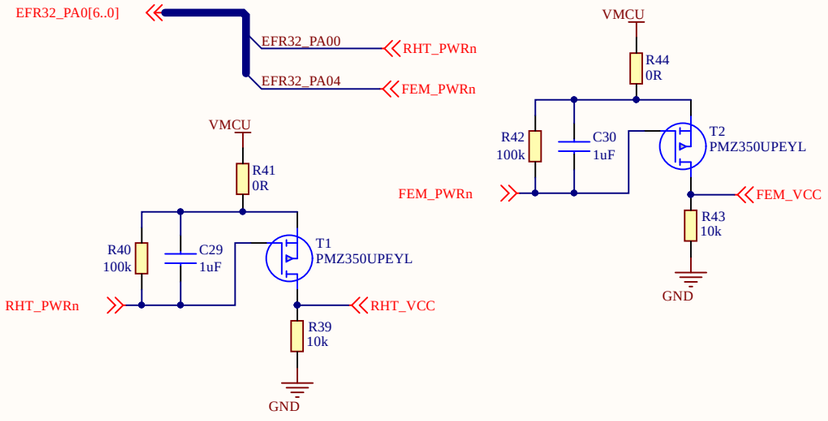
Debug Connections



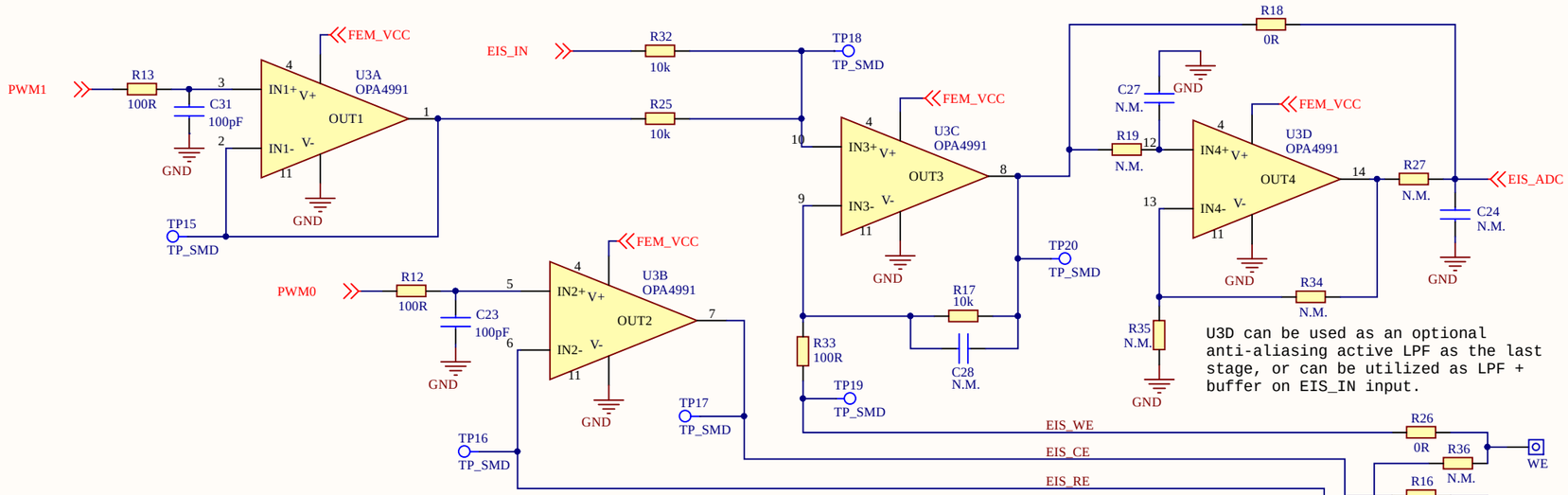
Test Points



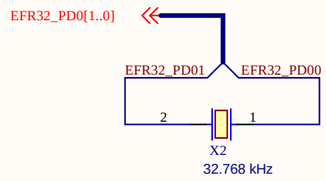
Power Switches for Sensors



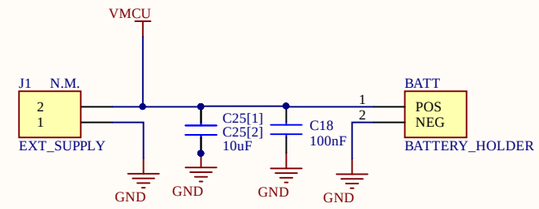
Analog 4-channel OpAmp interface for EIS with (shared) Electrodes



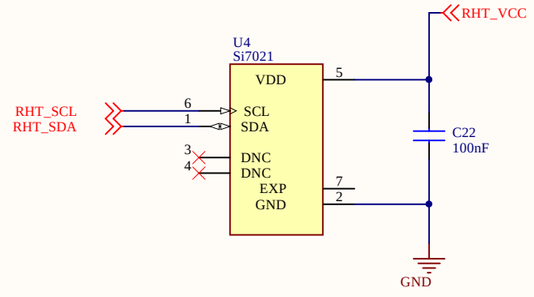
Low Frequency Crystal



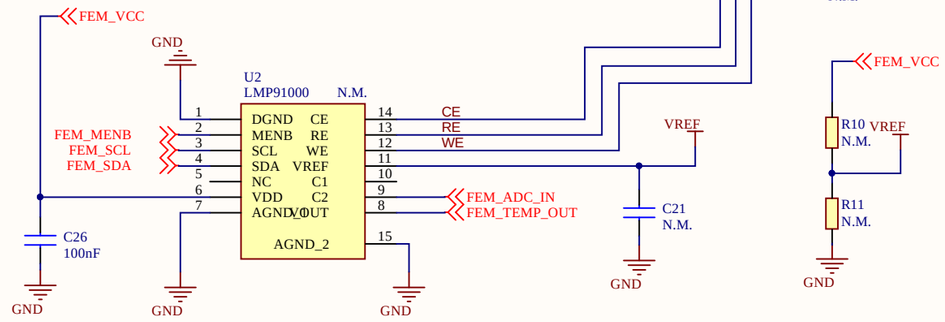
CR2450 Coin Cell Holder



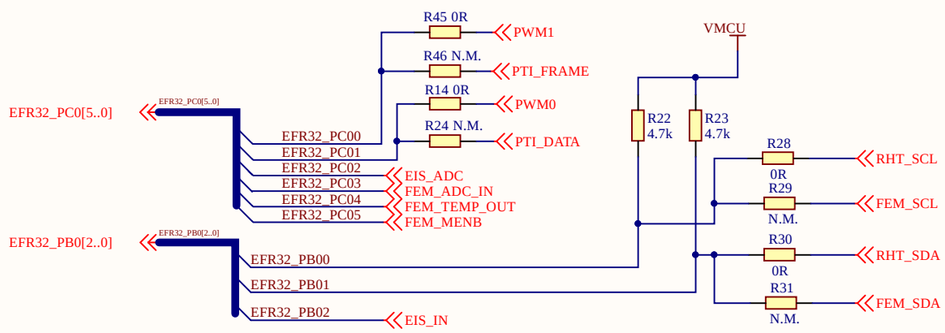
RH/Temperature Sensor



Analog FEM for Sensor (shared) Electrodes



GPIO mapping for the analog/sensor interfaces



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Schematic Title	EFR32xG27 Low Cost Reference Design for Agricultural IoT Applications
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