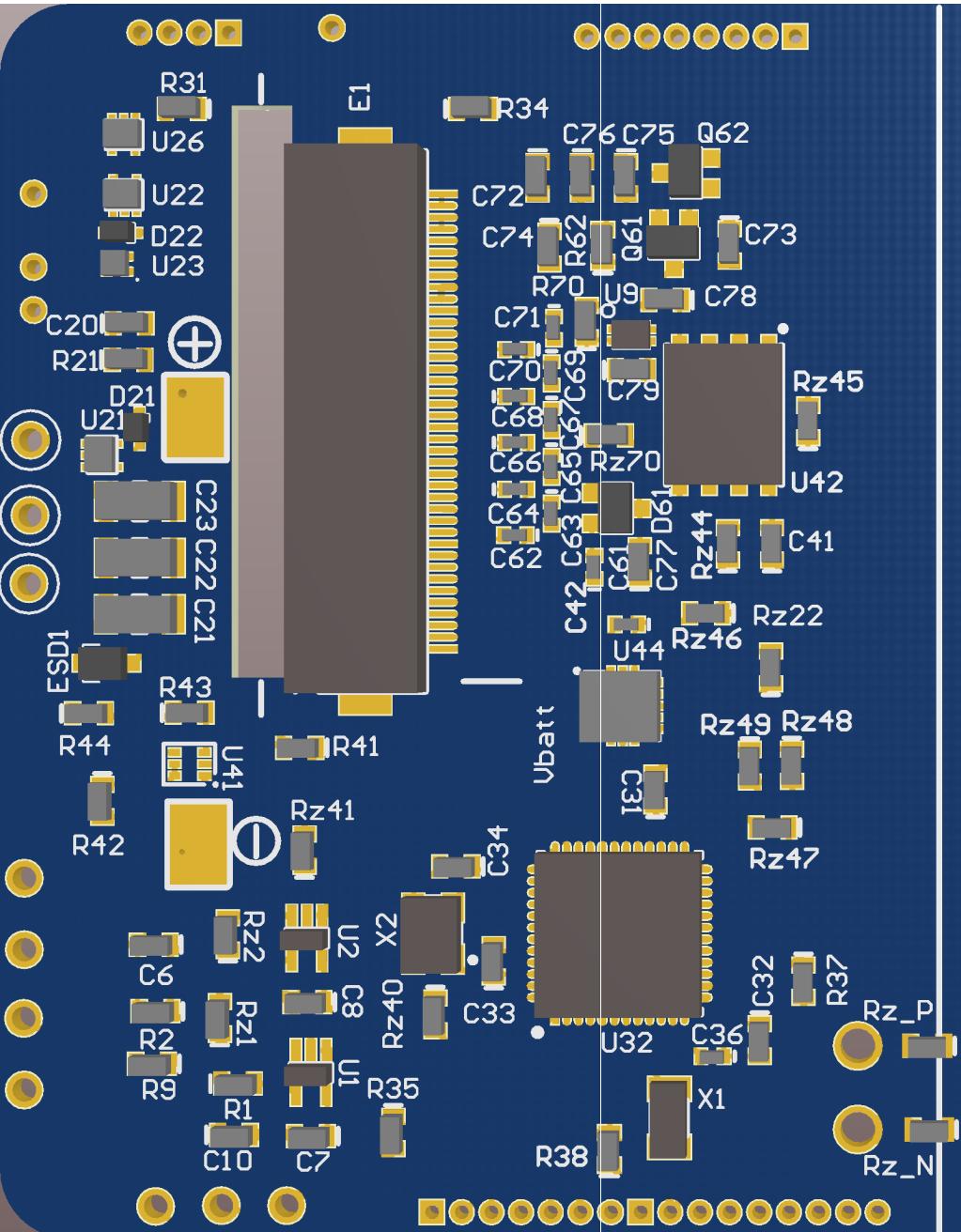


NFC-WISP_1.0

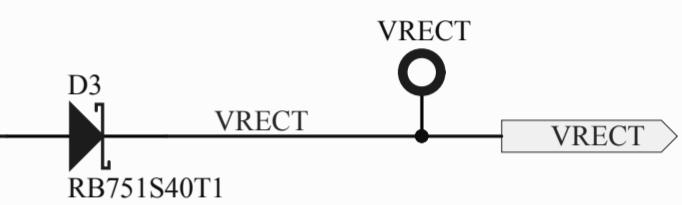
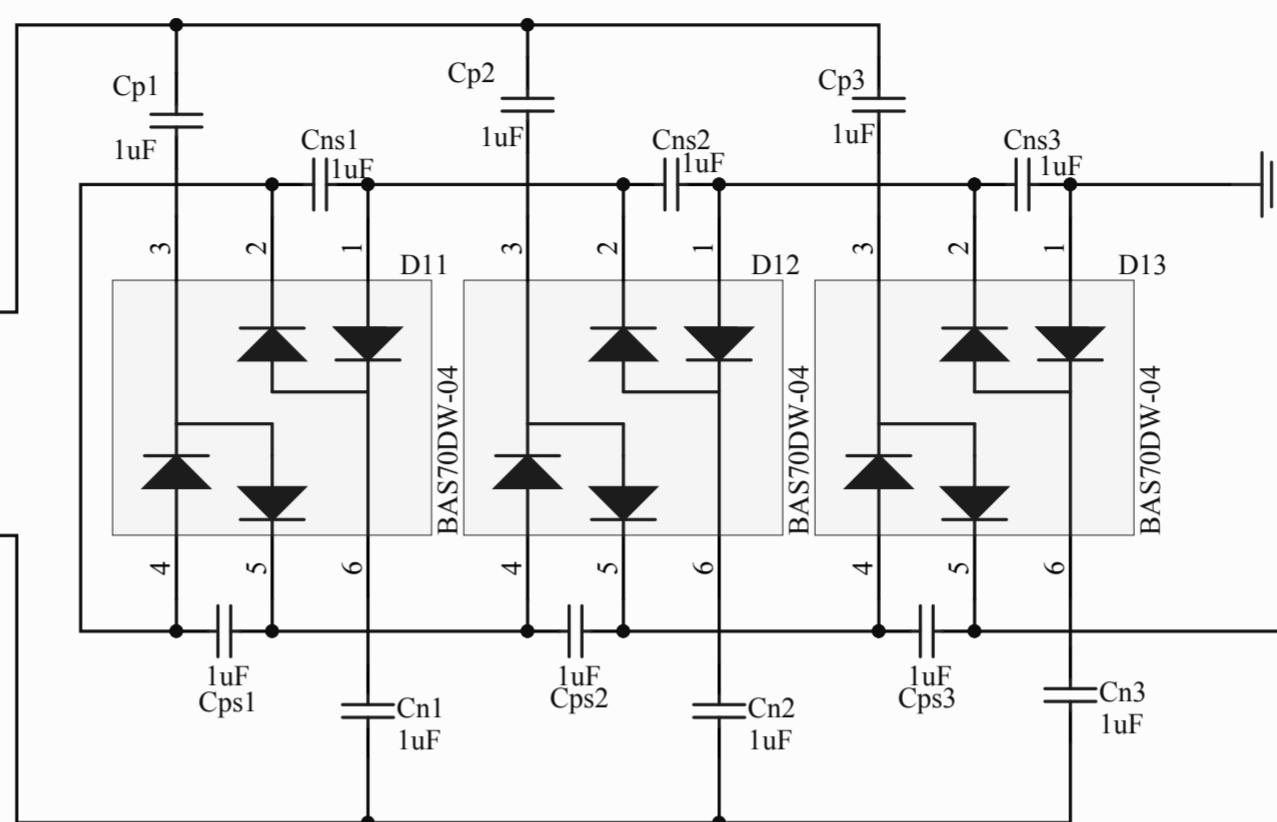
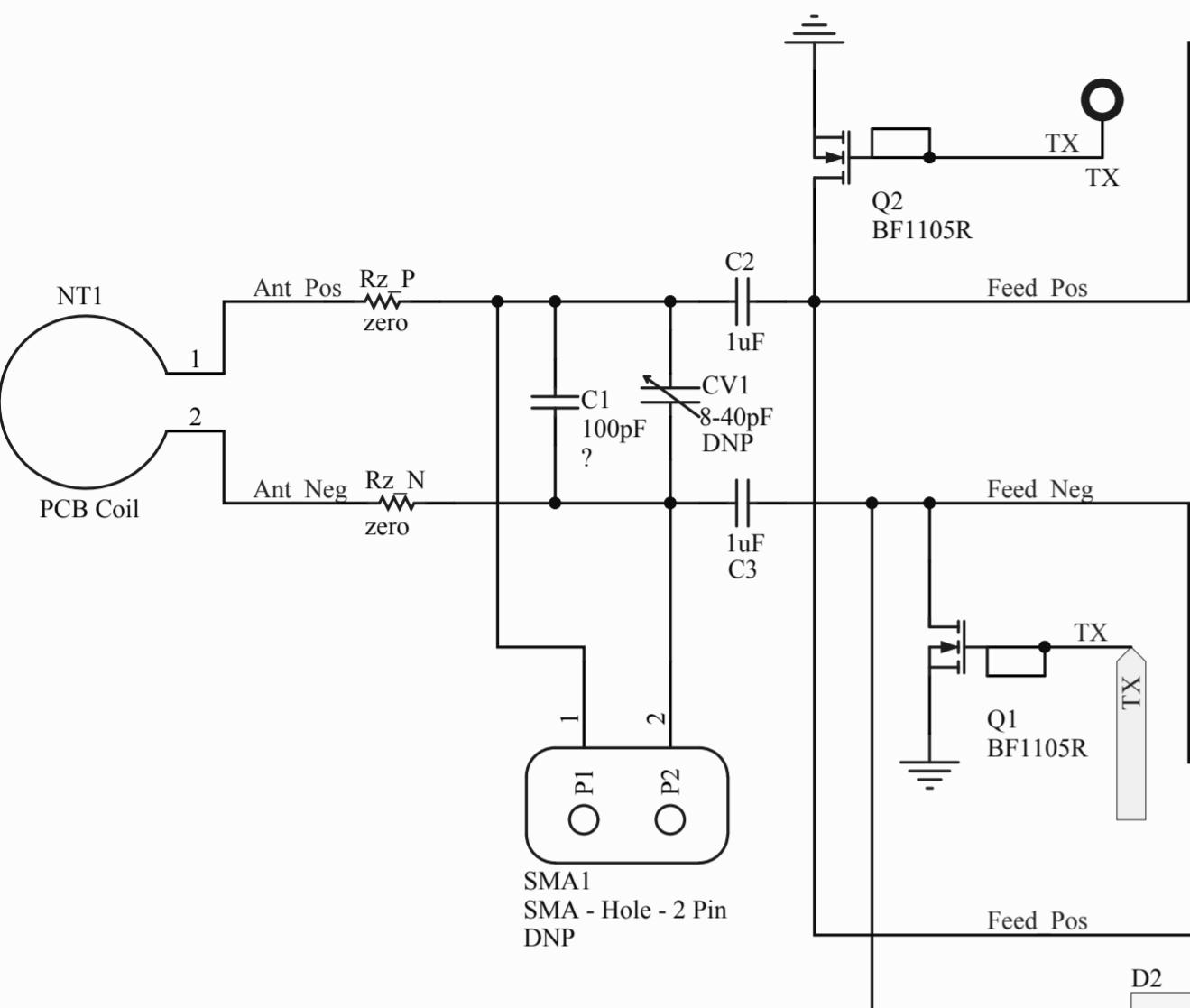
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NT1



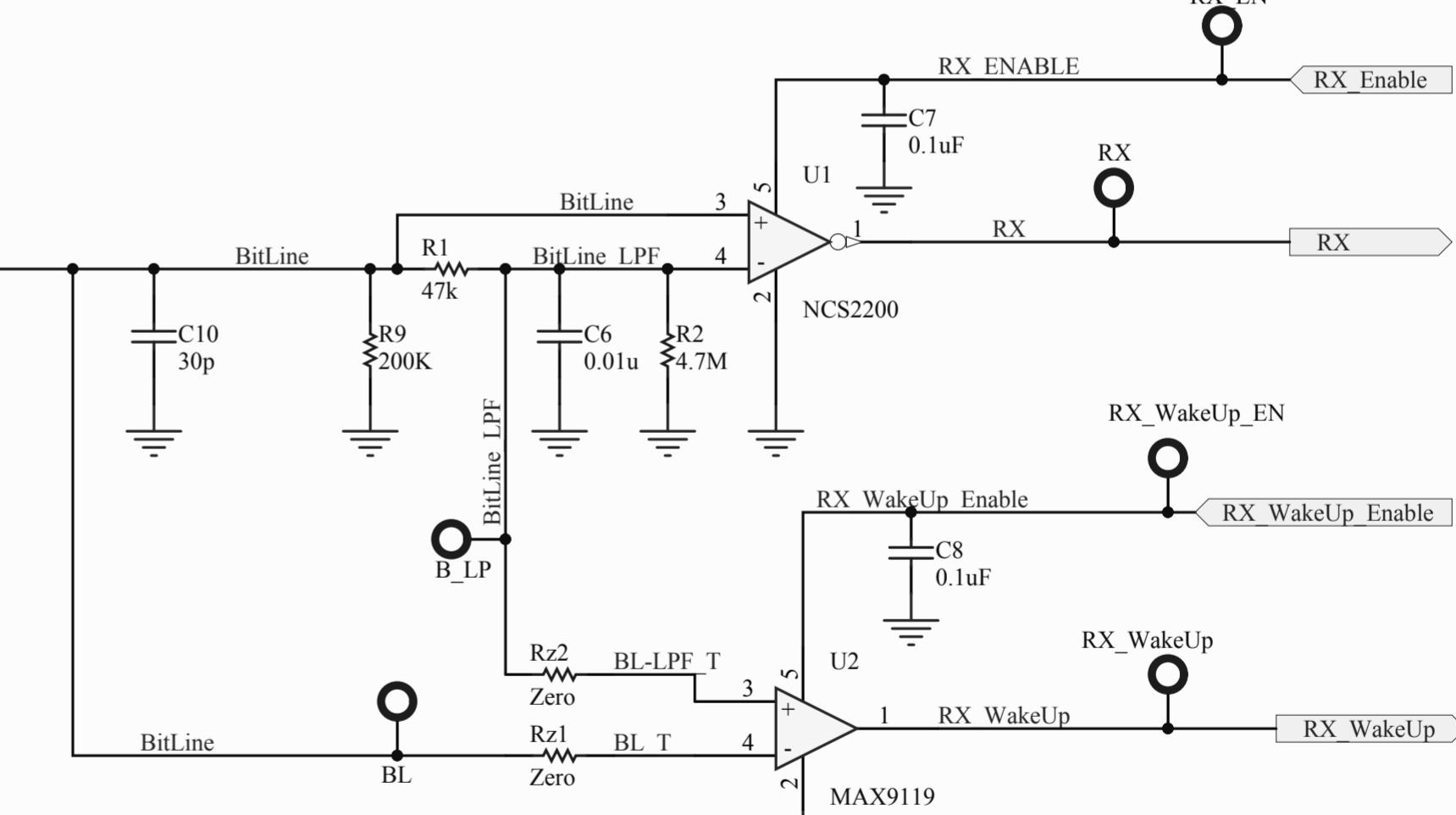
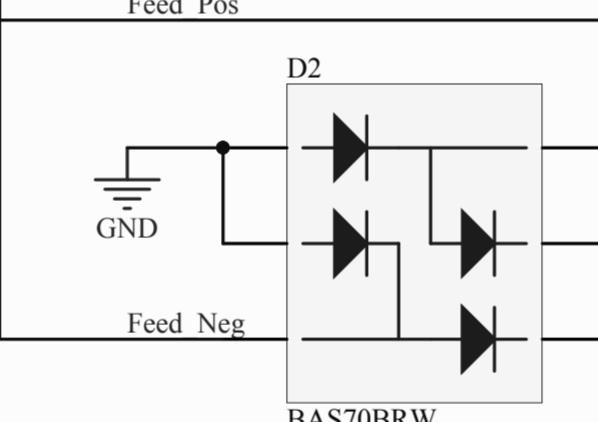
A



B

P1
P2

SMA1
SMA - Hole - 2 Pin
DNP



Todo:

- 1)VNA testing is needed to determine C1 and CV1
- 2) C1=100pF, leave Cv1 open is the best matching for Nexus s phone

*DNP => Do Not Populate

Title: *nfc-epd-afe.SchDoc*

Designed by: Yi Zhao (Eve), Alanson Sample

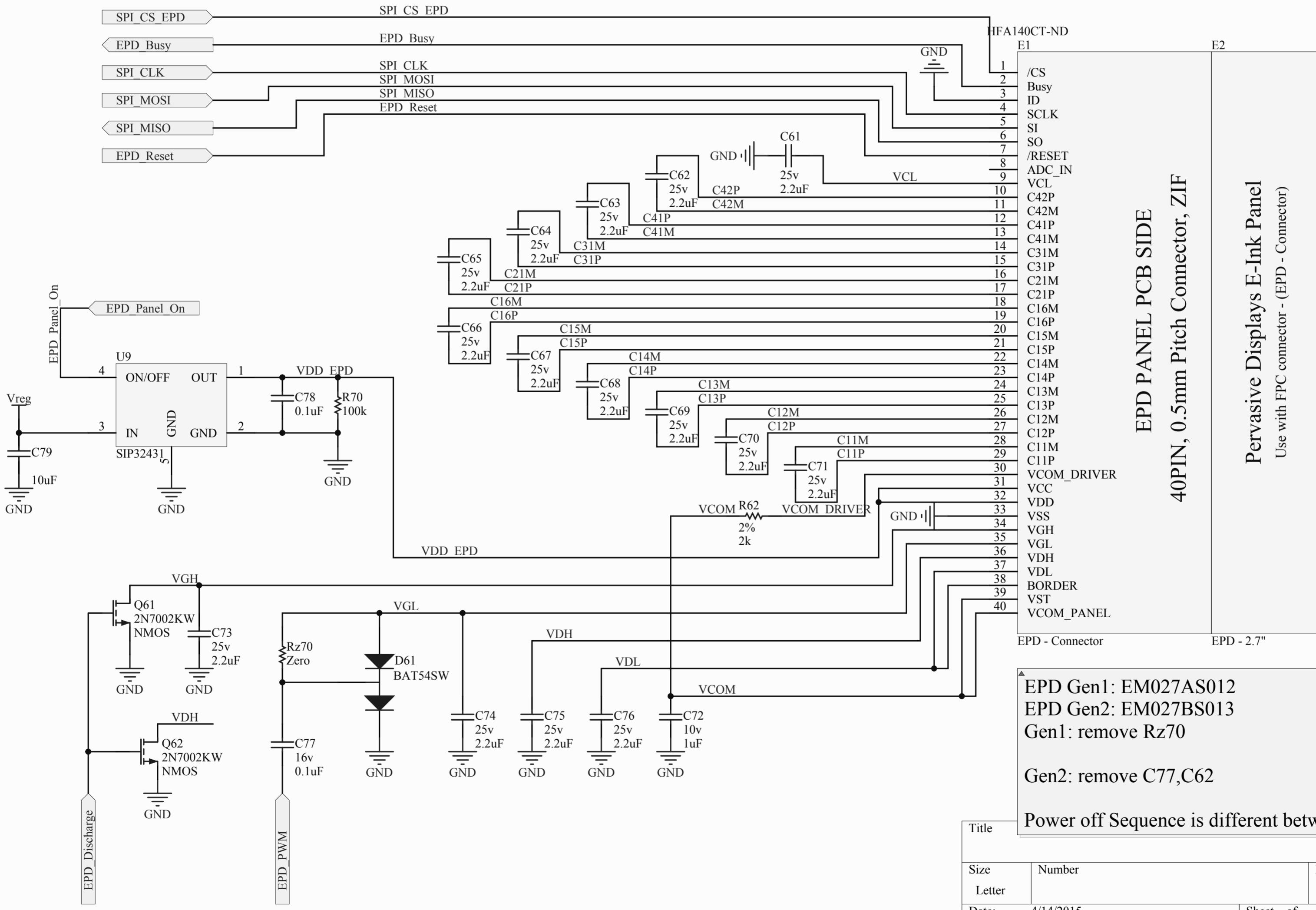
Data: 10/25/2014

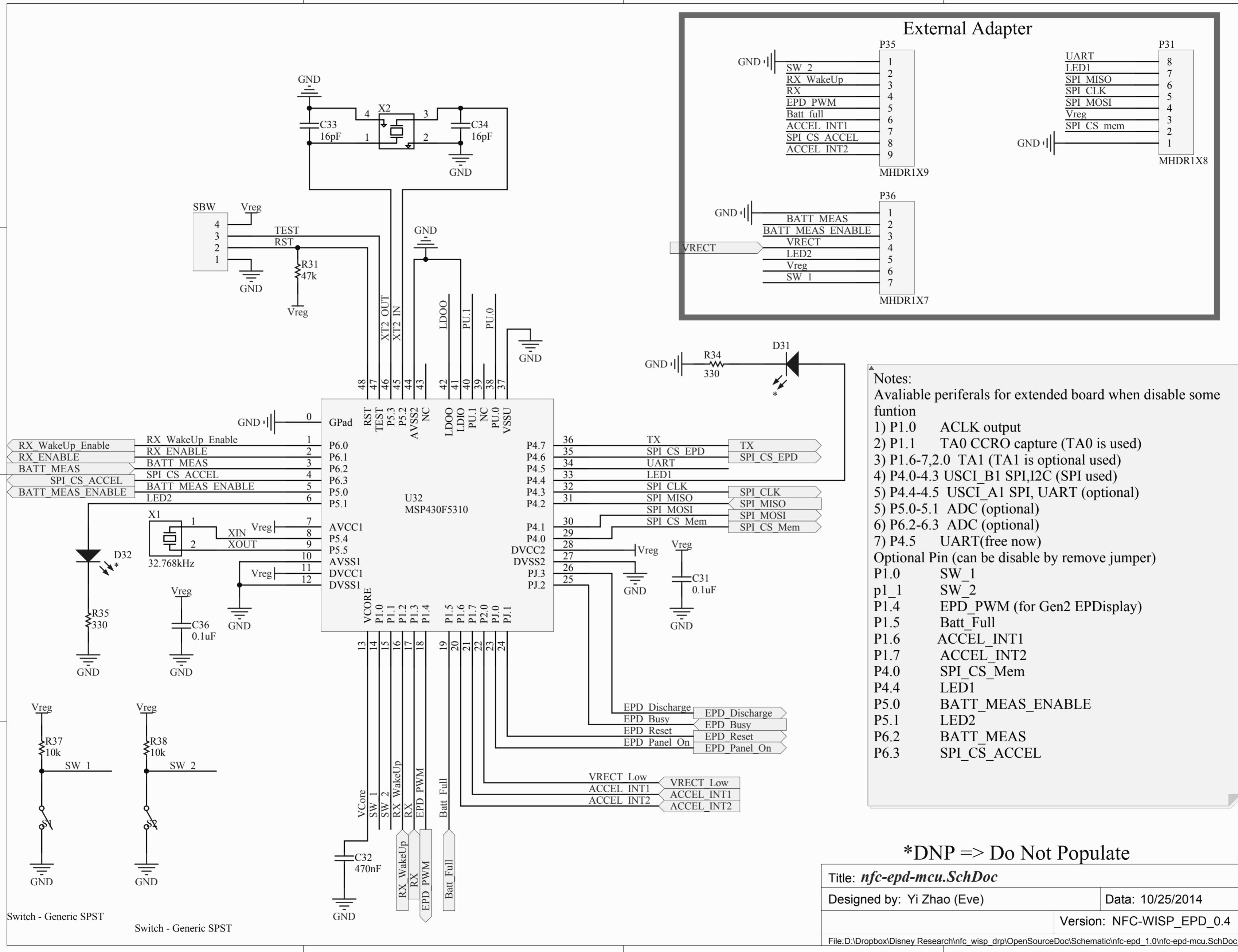
Version: NFC-WISP_EPD_1.0

File: D:\Dropbox\Disney Research\nfc_wisp_drp\OpenSourceDoc\Schematic\nfc-epd_1.0\nfc-epd-afe.SchDoc

A

A





Warning

1 The batter case is conductive

2 Remove Rz22 if we do not need to indicate to msp430 when battery is fully charged.

3 Red LED D24 will turn on when battery is fuully charged

Note:

Can custermize the battery full charged thresod

1 assemble Rz23 full charge threshold is 4V

2 assemble Rz21 threshold is 4.2V

3 remove Rz23&Rz21 threshold is

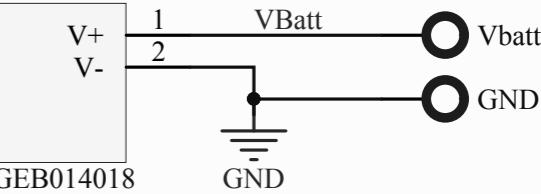
4.1V

Higher threshold give better runtime but will decrease battery life.

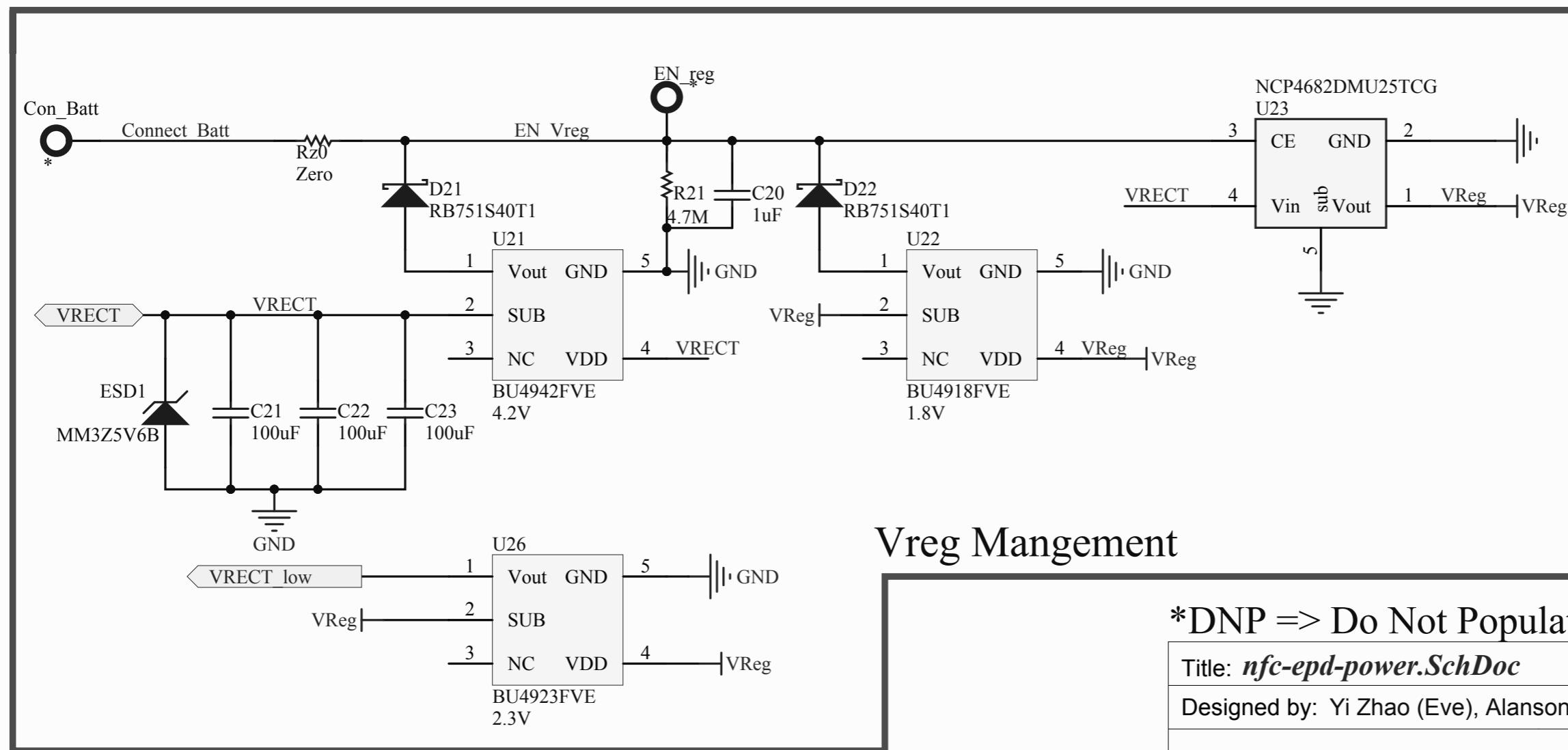
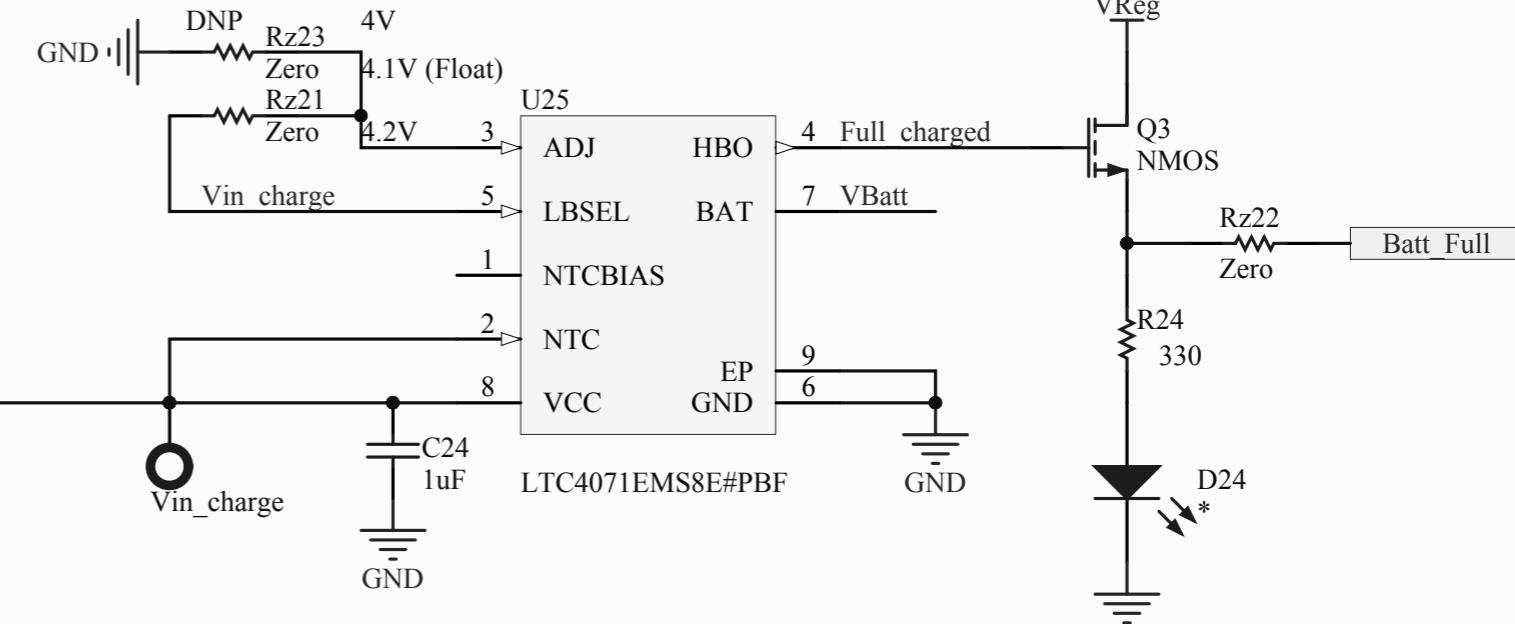
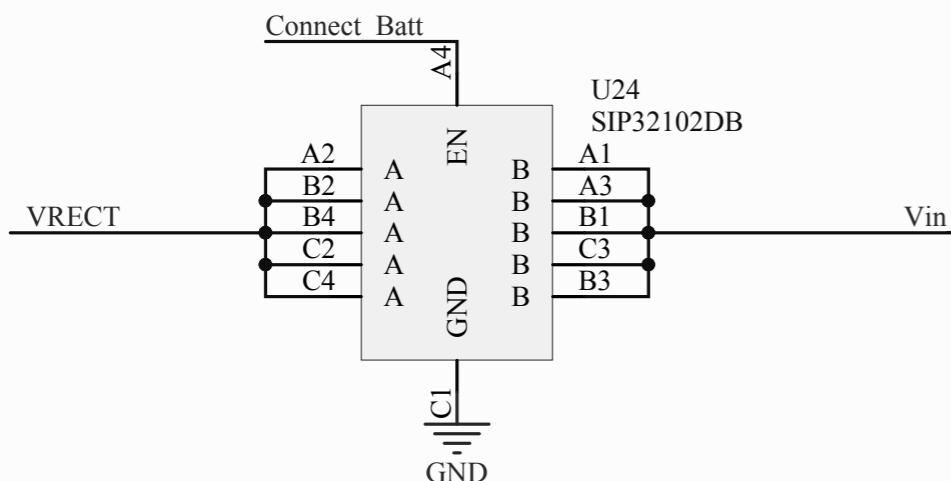
Note:

Vect_low is turn low when Vrect is below 2.3V, we can not update E-ink when Vrect below 2.3V.

B1



Battery -PGE0054018 or PGEB014018
4.1v @ 10-30mAh



Vreg Mangement

*DNP => Do Not Populate

Title: *nfc-epd-power.SchDoc*

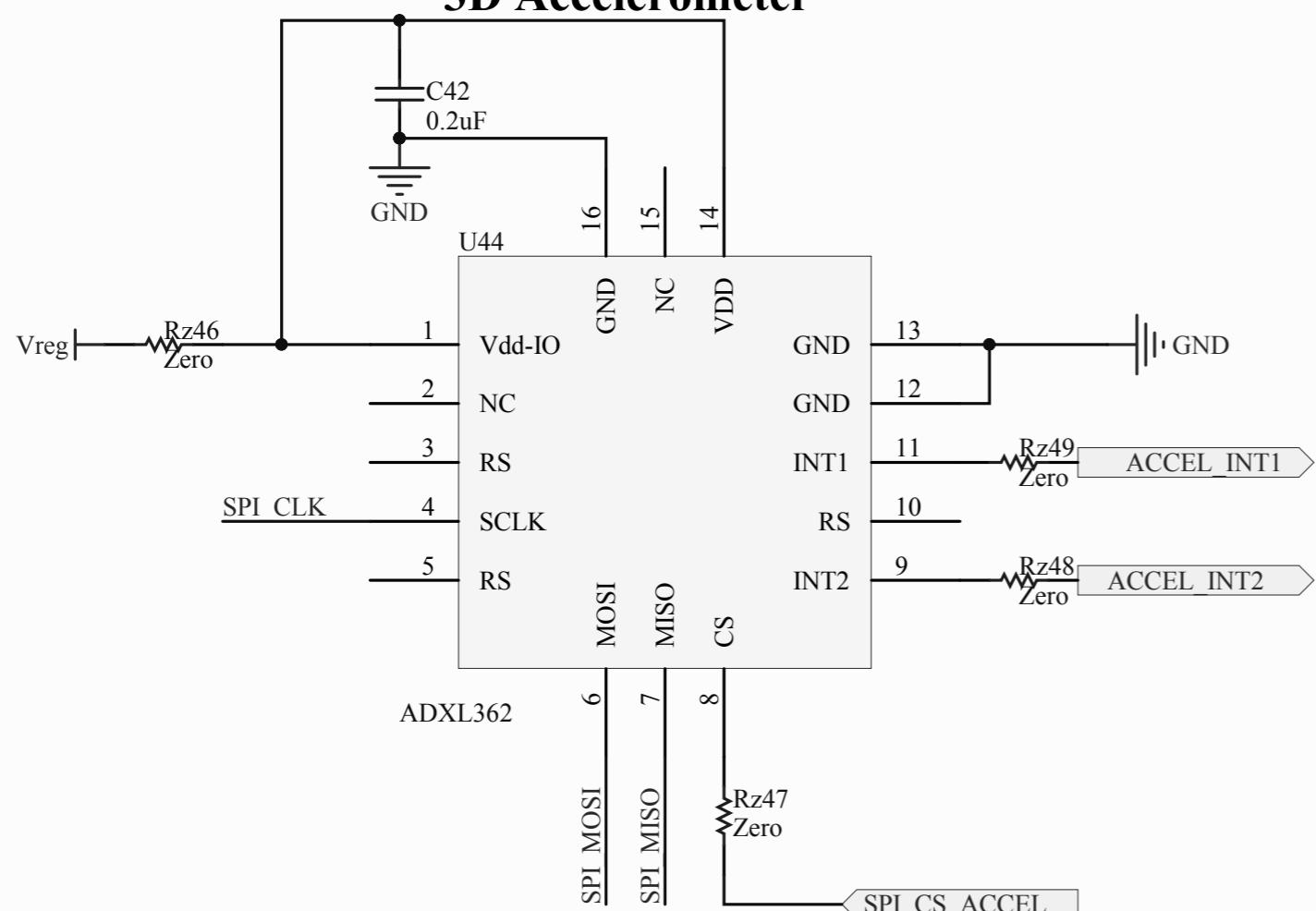
Designed by: Yi Zhao (Eve), Alanson Sample

Data: 10/25/2014

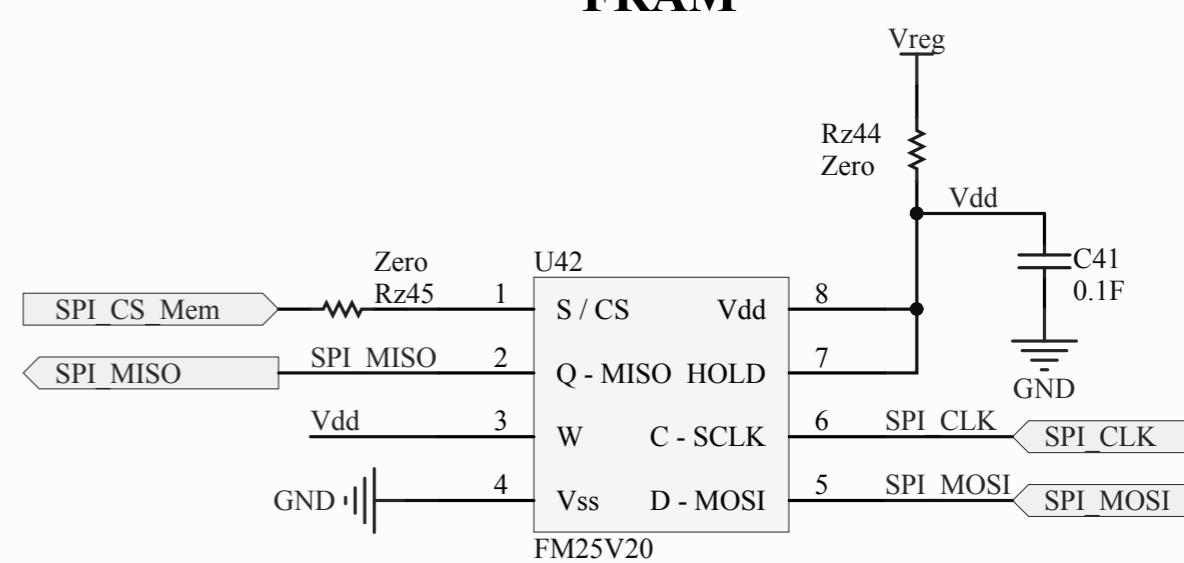
Version: NFC-WISP_EPD_1.0

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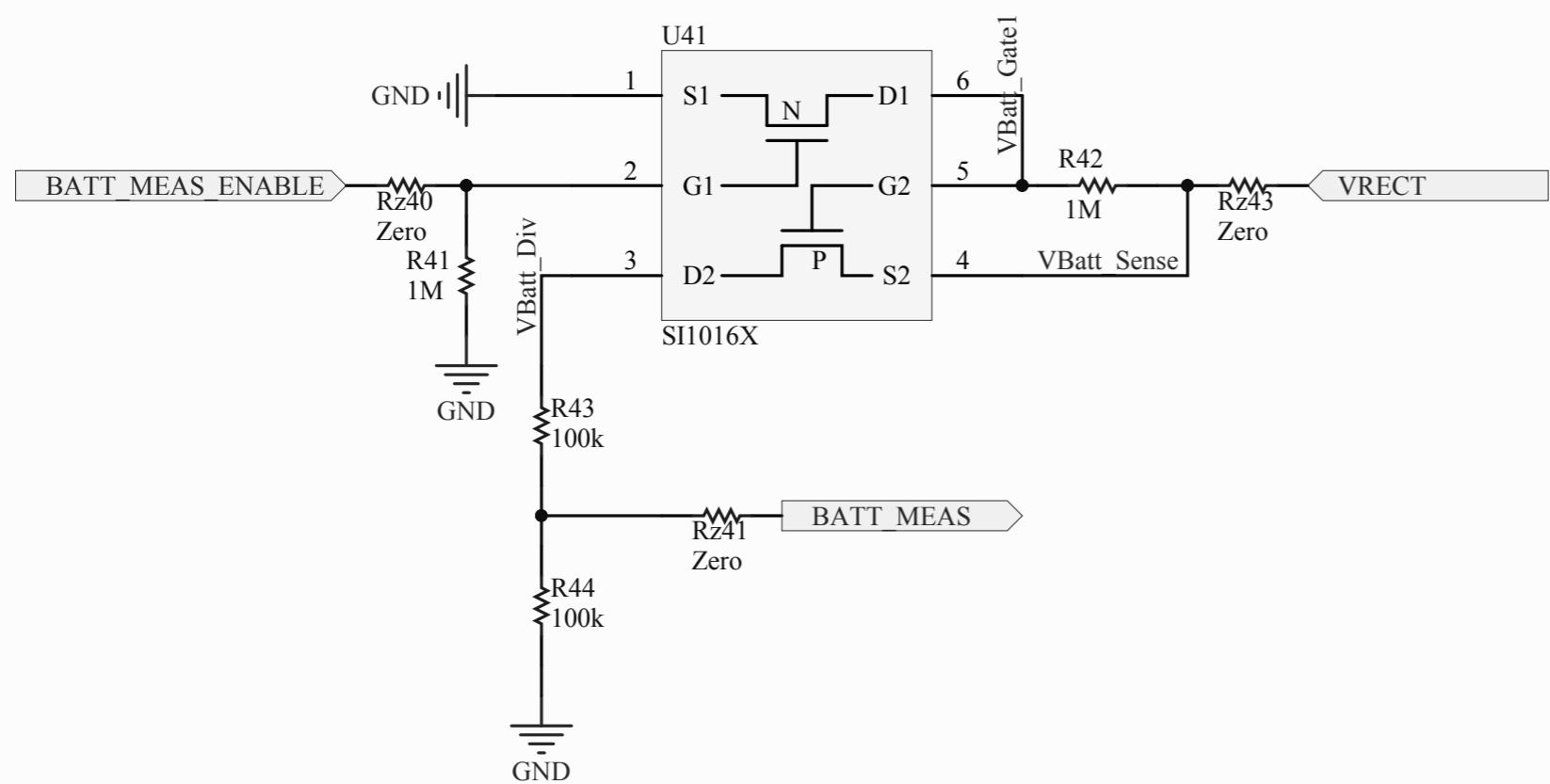
3D Accelerometer



FRAM



High-side switching for supply voltage measurement



Note:
U41 can be disabled by remove Rz40, Rz41, Rz43 to save power or provide I/O Pin

*DNP => Do Not Populate

Title: *nfc-epd-sensors.SchDoc*

Designed by: Yi Zhao (Eve)

Data: 10/25/2014

Version: NFC-WISP_EPD_1.0

File:D:\Dropbox\Disney Research\nfc_wisp_drp\OpenSourceDoc\Schematic\nfc-epd_1.0\nfc-epd-sensors.SchDoc

Public Note:

Library Requirements:

WISP_AD10.PcbLib

WISP_AD10.SchLib

Miscellaneous Connectors.IntLib

Design Rules:

nfc-epd_1.0.RUL

(see document

[nfc-epd-Instructions_v1.doc](#)?for instructions

importing design rules and addition information and

guidelines. Design rules files used for this project are

modified from the 4 layer versions:

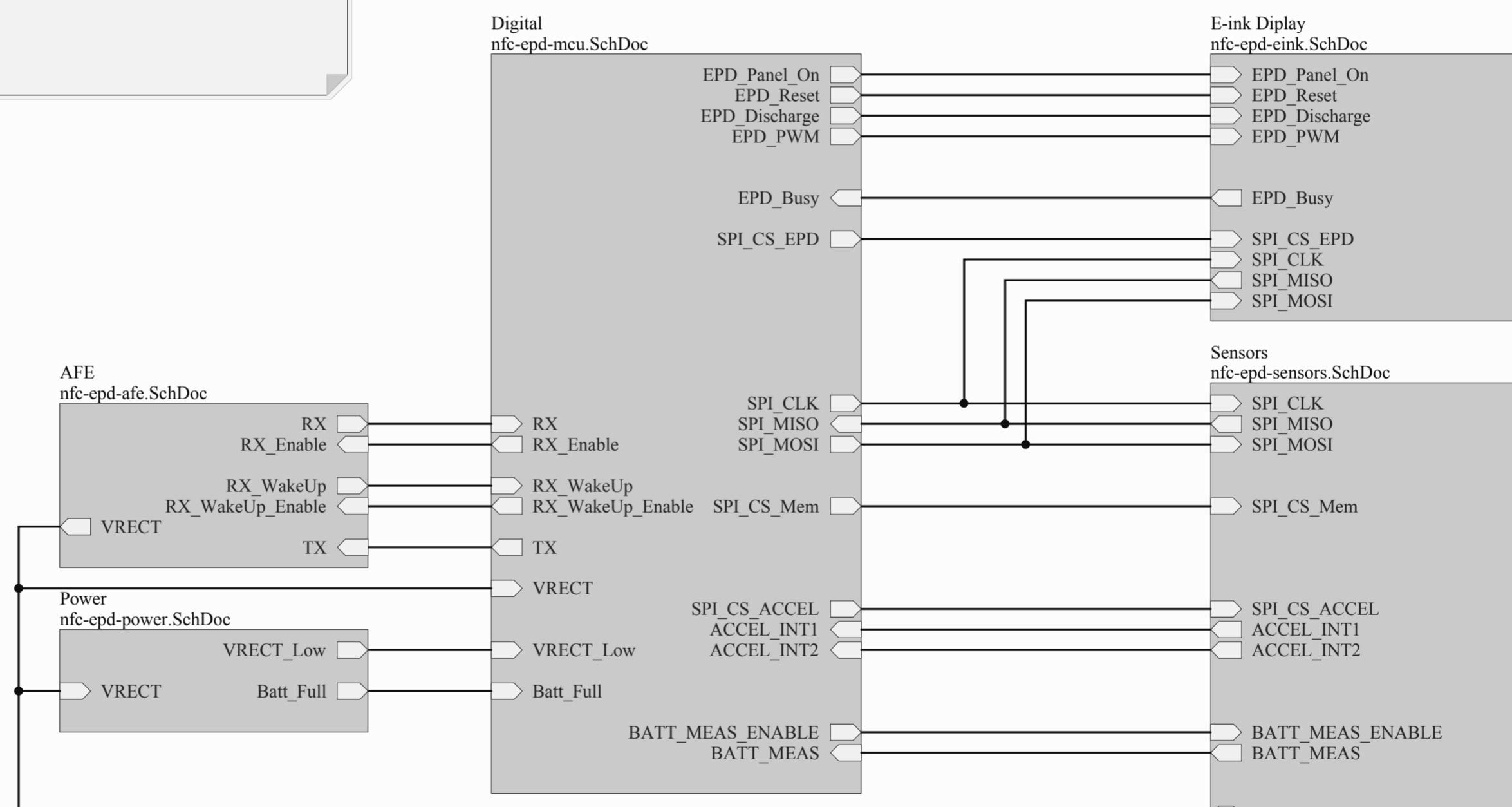
[nfc-epd-DFM-MLB-final.RUL](#)

Preliminary Release Notes:

Project and file naming convention:

Any projects/boards ending with a revision number less than 1 are considered pre-release (example: [nfc-epd-board_0.3](#)? Boards that are release to be public automatically get promoted to 1.0 (example: [nfc-epd-board_1.0](#)).

Individual schematics and pcb files will be appended with a suffix [vX](#)?to denote file revisions (example: [nfc-epd-board_0.3](#)?digital_v1.SchDoc?or [nfc-epd-board_0.3](#)?PCB_v6.PcbDoc).



Note:
AE is intentionally not connected at this time.

*DNP => Do Not Populate

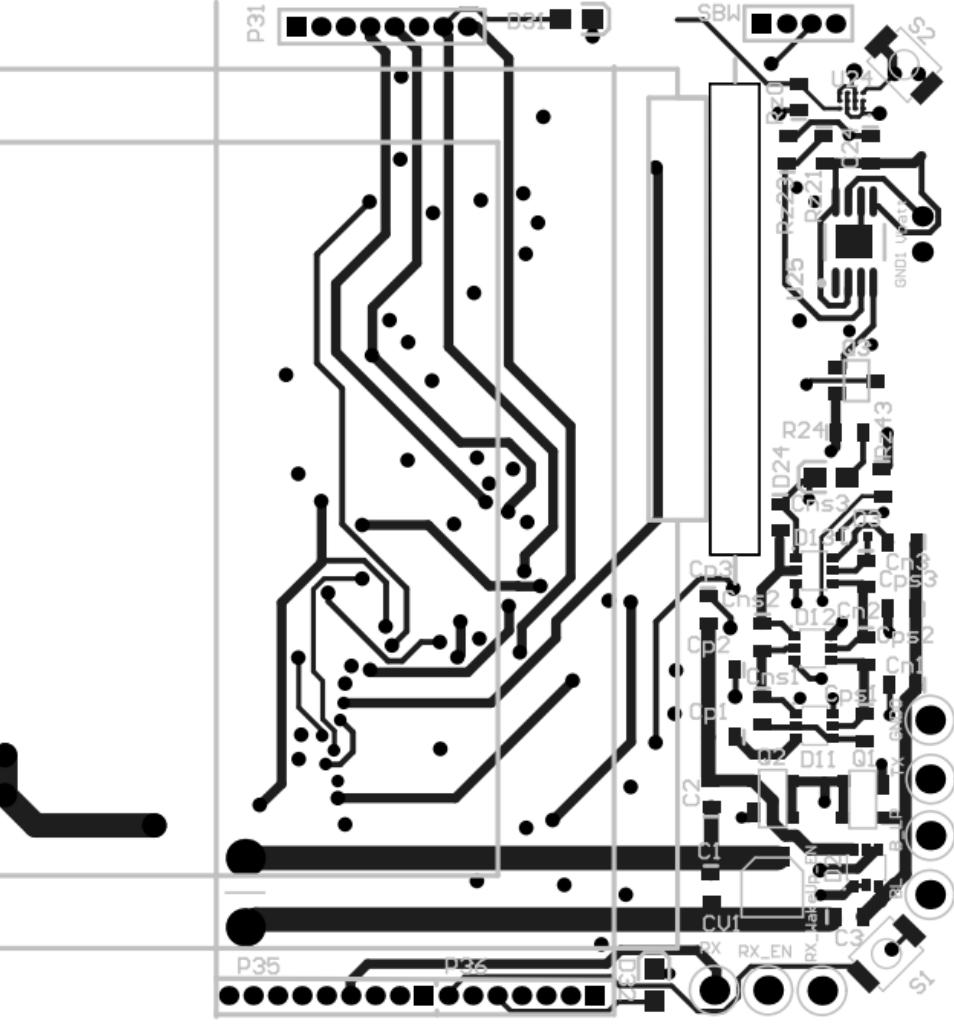
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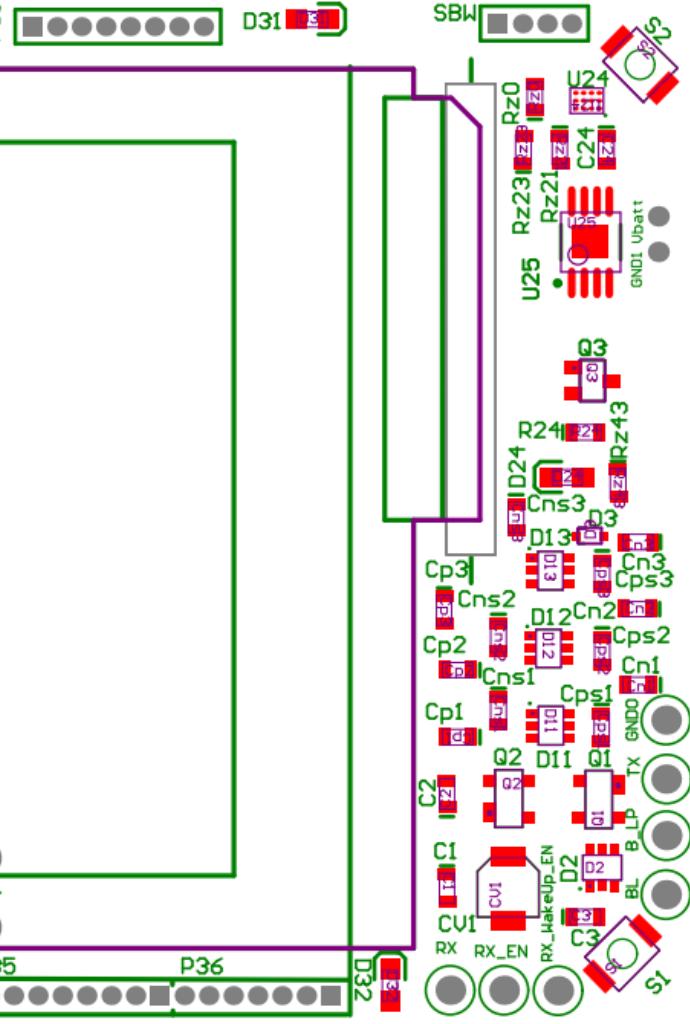
Designed by: Yi Zhao (Eve), Alanson Sample

Data: 10/25/2014

Version: NFC-WISP_EPD_0.4

File:D:\Dropbox\Disney Research\nfc_wisp_drp\OpenSourceDoc\Schematic\nfc-epd_1.0\nfc-epd-top.schdoc

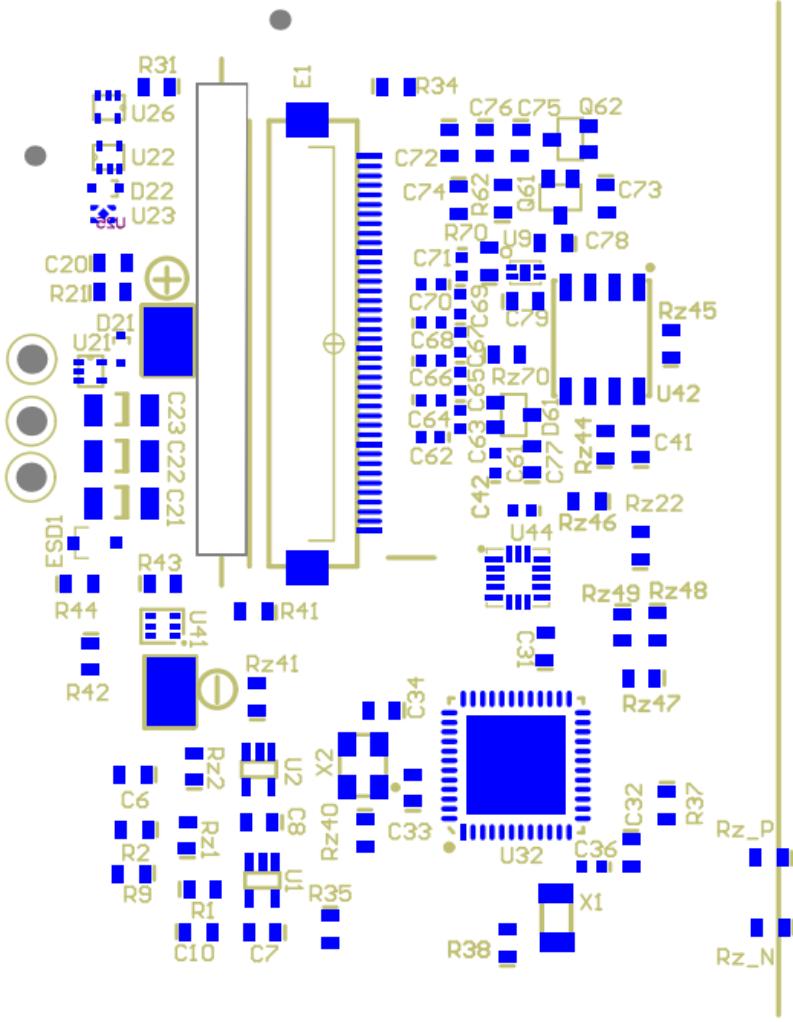




NFC-WISP_1.0

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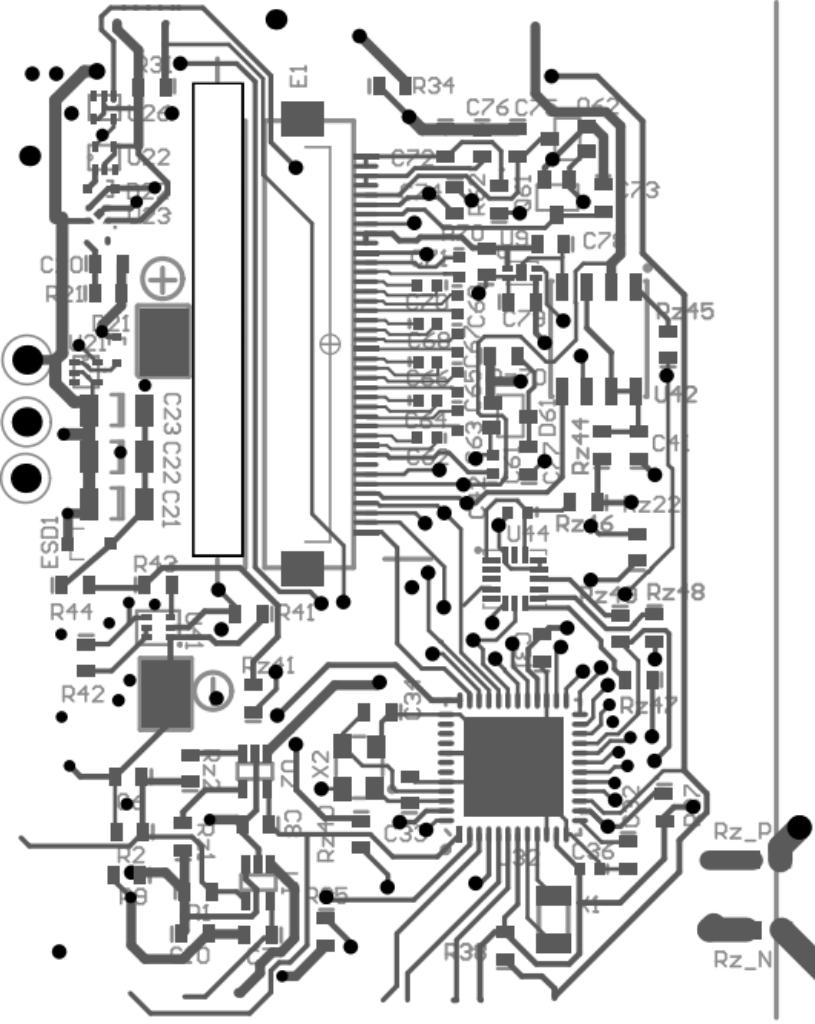
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NFC-WISP_1.0

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U31

S2

E2

U32

S3

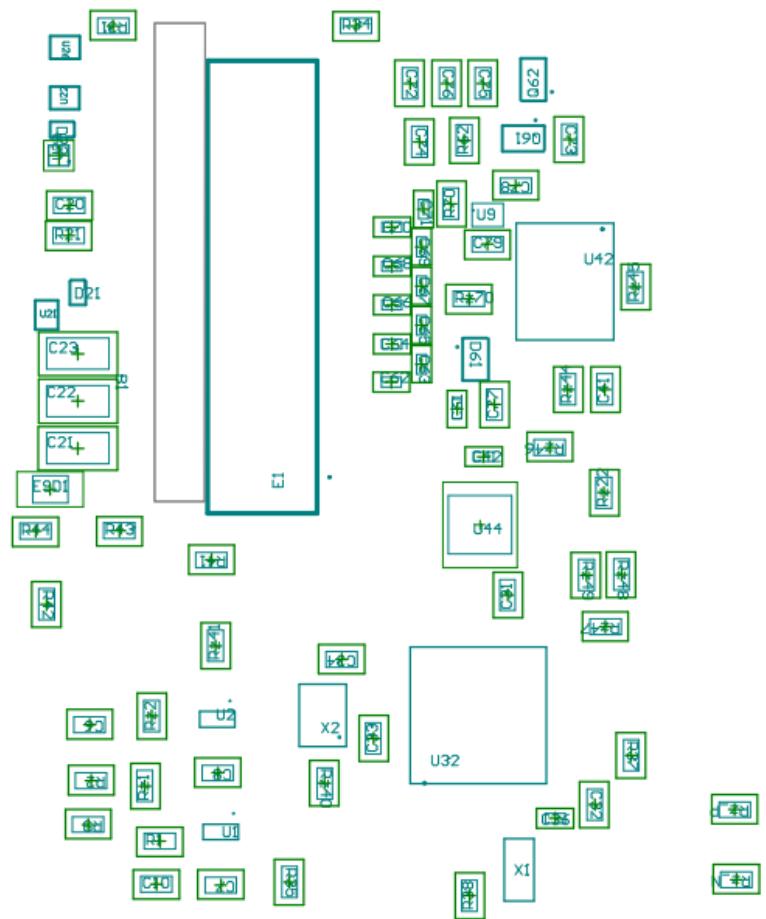
U31

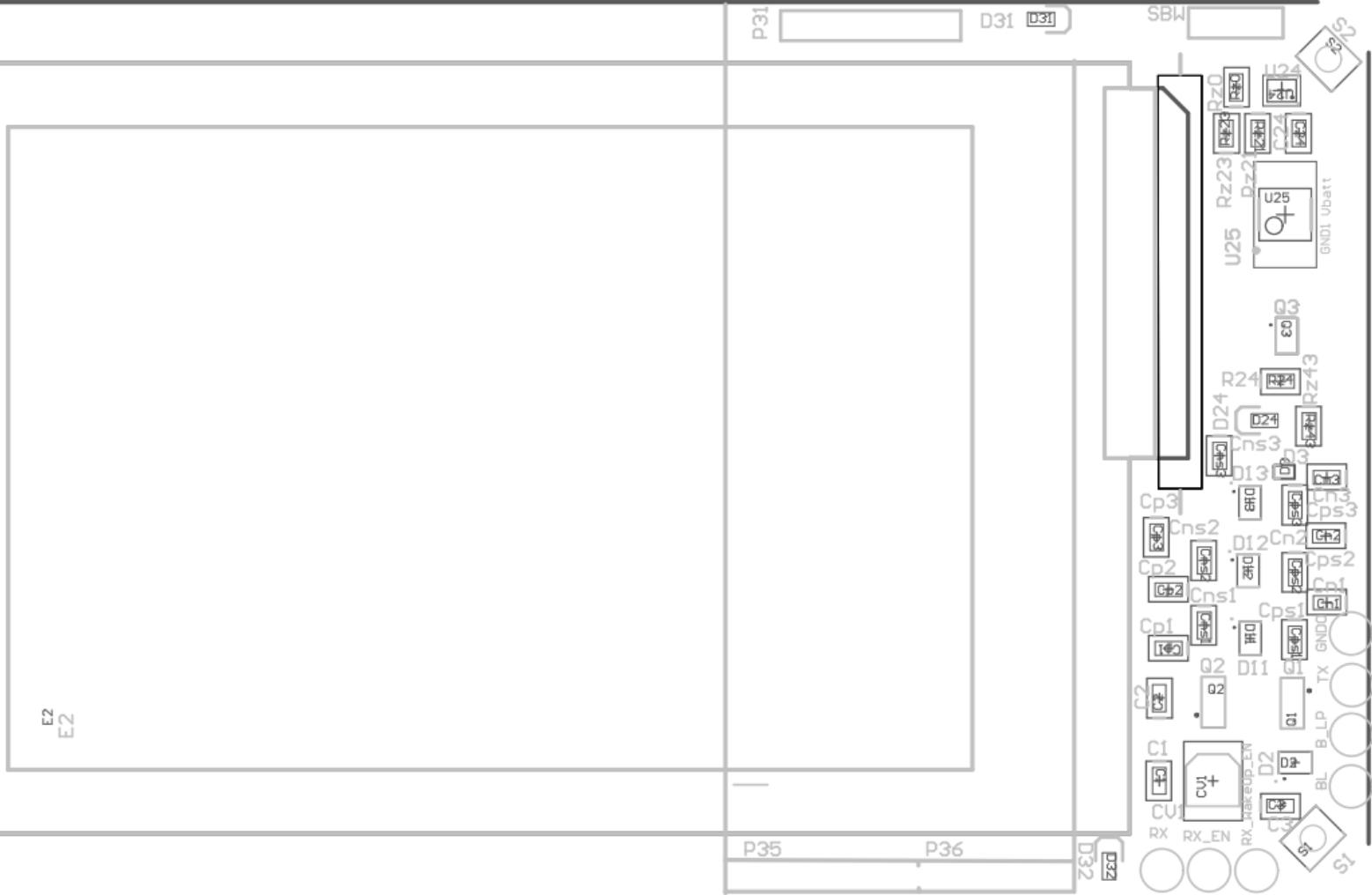
S2

E2

U32

S3





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MEC-MISB_1.0

