

PROJECT: NIT8M\_MINI\_SOM

REVISION: REV40A-R \*

CURRENT DATE: 9/19/2022

\* P#: Preliminary Revision, R: Released, RW: Released and ReWorked

## REVISION HISTORY

2019-12-05 **Revision change: REV20A**

1. D1 Removed, R117 changed to 56K; to allow PMIC\_ON\_REQ to enable the PMIC for battery operated products
2. U24 added for WiFi reset voltage translator
3. R38 (USB2\_ID) changed to pull down; Makes USB2\_OTG default to be HOST
4. U23, ON\_OFF voltage traslator added , R55 pull-up reworked after PCB production
5. R42 (POR\_B pull up) removed
6. 10 bypass CAPS added to PMIC; Improved PMIC layout
7. R120 (LDO1\_3P3V pull down) added; a minimum load in case its floating
8. U5 changed from 74AUP1G09SE-7 to 74AUP1G08SE-7; Switched from open drain output to push-pull output
  - 8a. R53, Pull-up resistor removed from RESET\_N and added pull-down resistor on MRESET\_N
  - 8b. R52 Pull-up on EXT\_RESET\_N changed from 1P8V to 3P3V, and value changed from 10K to 100K
9. U20, WDG voltage translator has changed to 2N7001TDCKR, C701 changed to C115, C702 changed to C114

2020-02-26 **Revision change: REV30A**

1. R7 33R added to bypass U24, and U24 changed to NS as default
2. Fiducials added to PCB
3. Previously reworked R55 added to PCB.

2020-04-06 **Revision change: REV30B**

1. C215 chnaged from NS to 47uF
2. L18 changed from NS to SRP4020TA-1R0M

2020-06-11 **Revision change: REV30C**

1. R103 changed from 100K to 20K
2. R117 changed from 56K to 12K
3. U22 changed from TLV75518PDBVR to TLV75718PDBVR for higher current

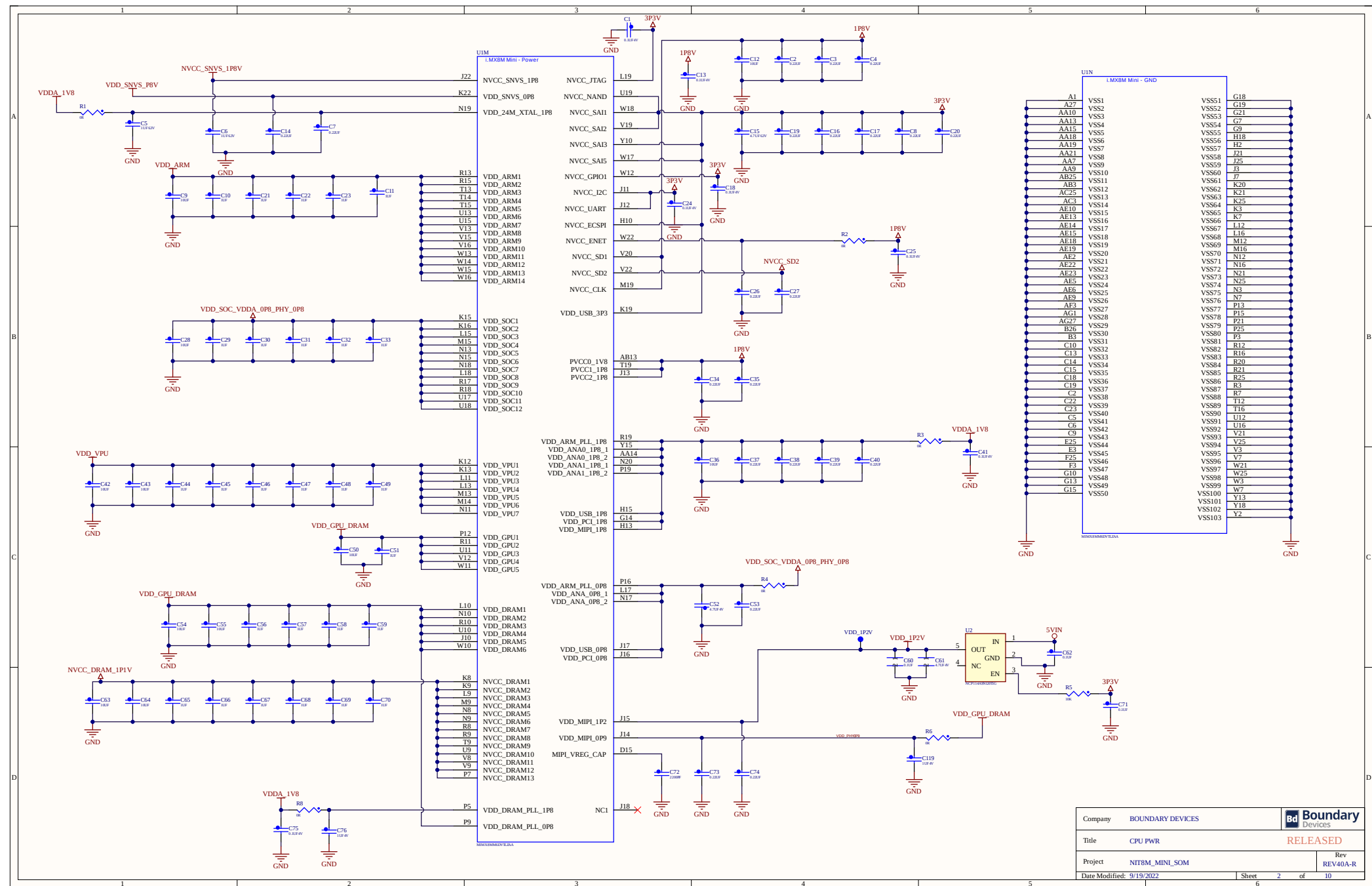
2022-01-13 **Revision change: REV40-P1**

1. U10 in RGMII page changed to KSZ9031RN

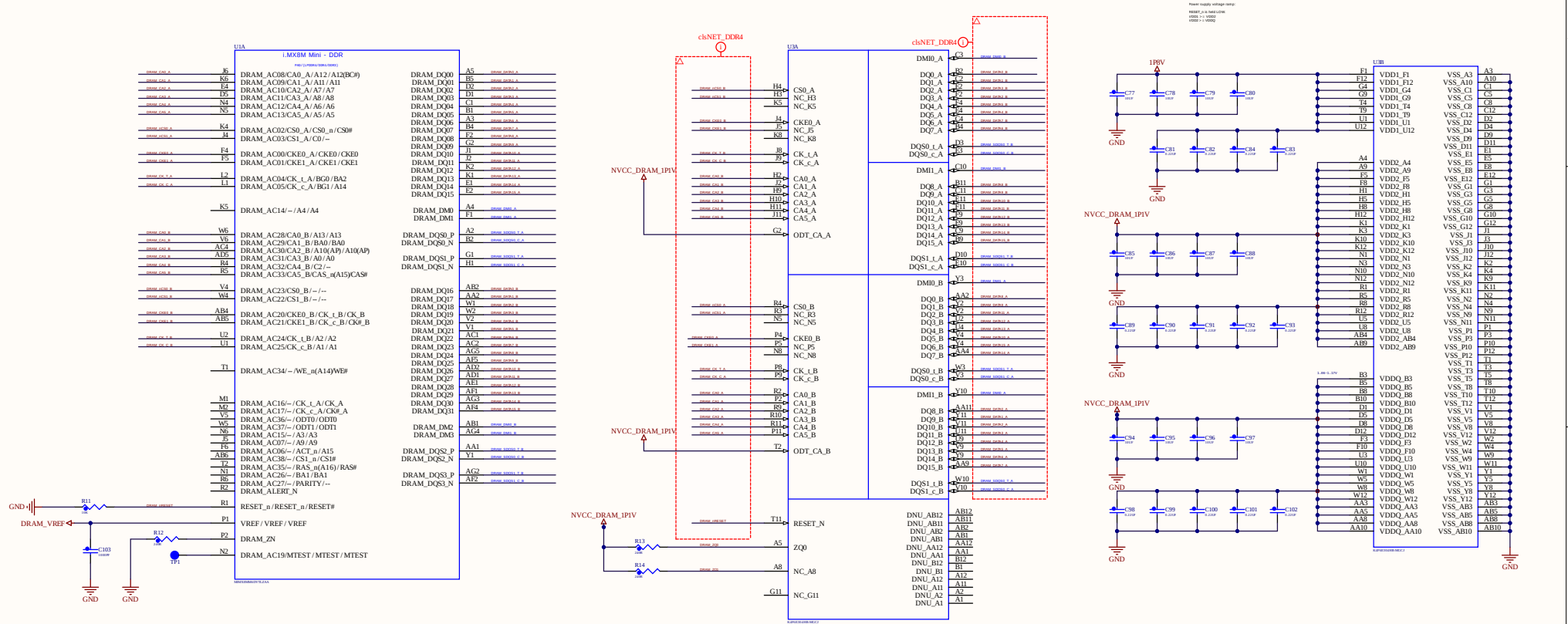
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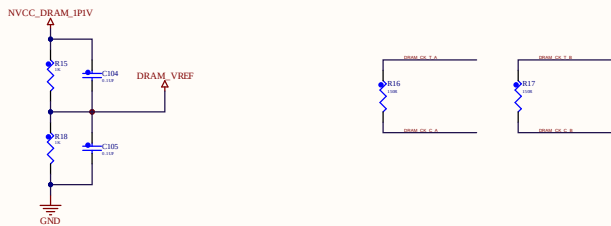
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|--------------------------|------------------|---------------------------------------------------------------------------------------|
| Company                  | BOUNDARY DEVICES |  |
| Title                    | NOTES            | RELEASED                                                                              |
| Project                  | NIT8M_MINI_SOM   | Rev<br>REV40A-R                                                                       |
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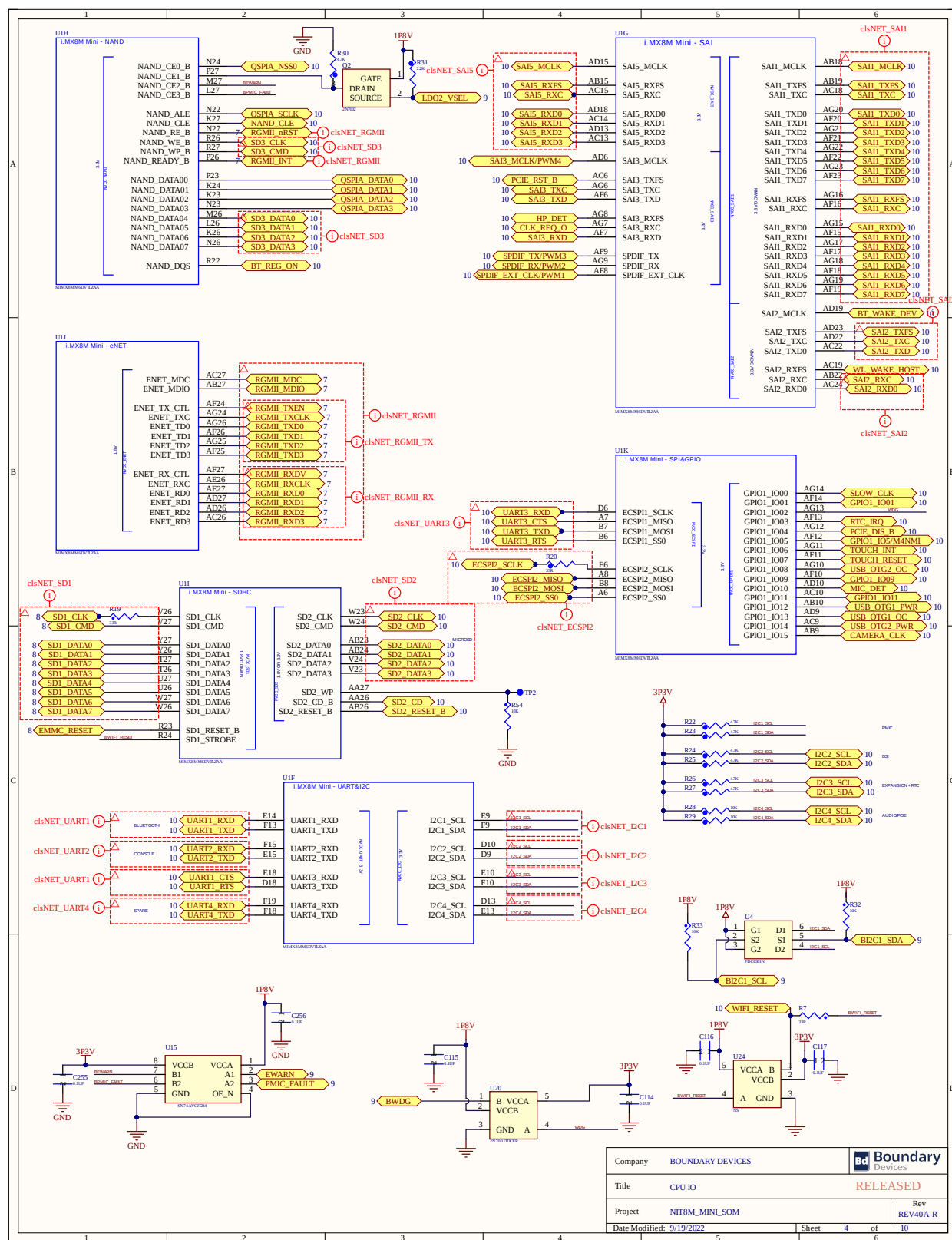


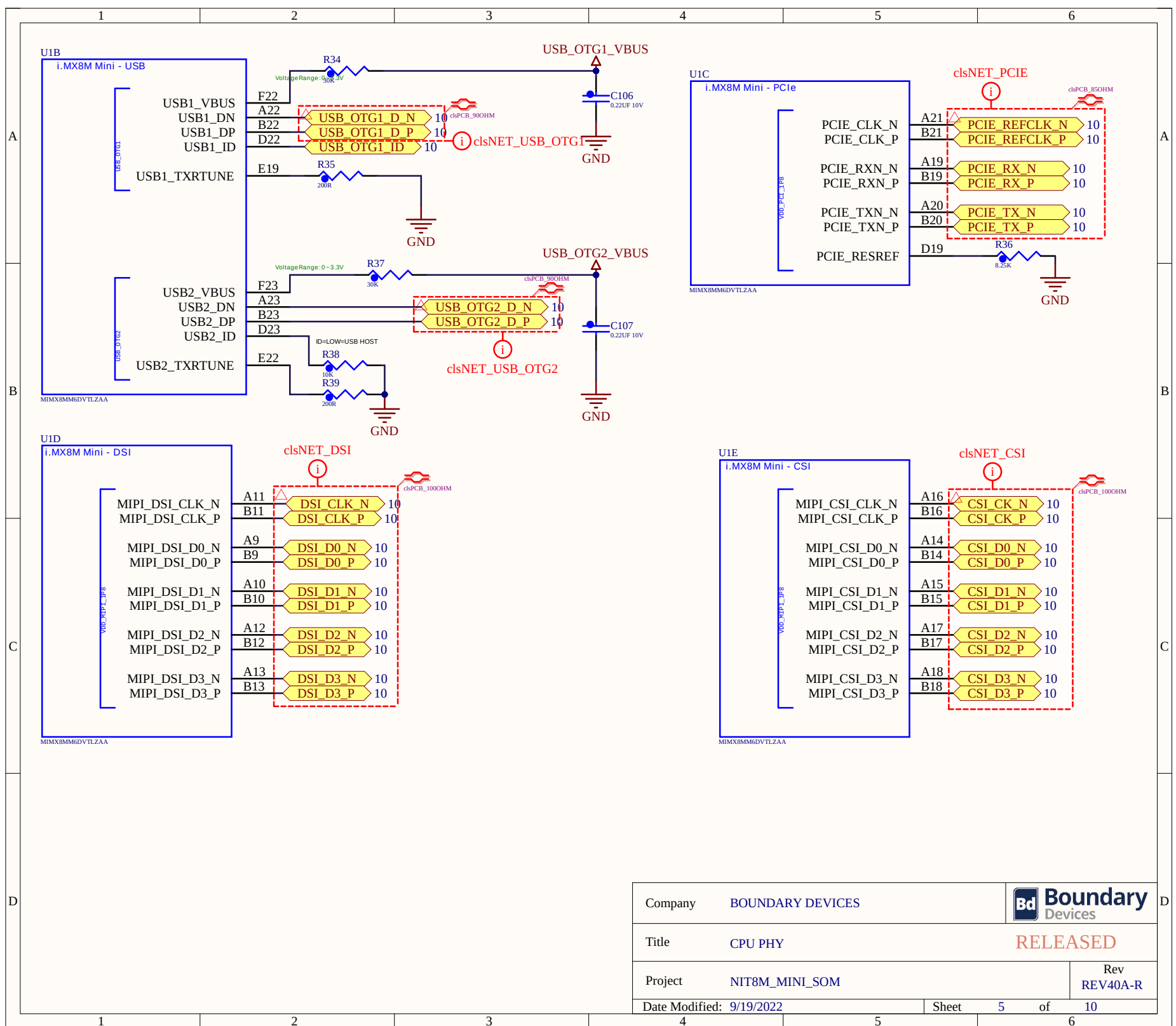
LPDDR4 2GB



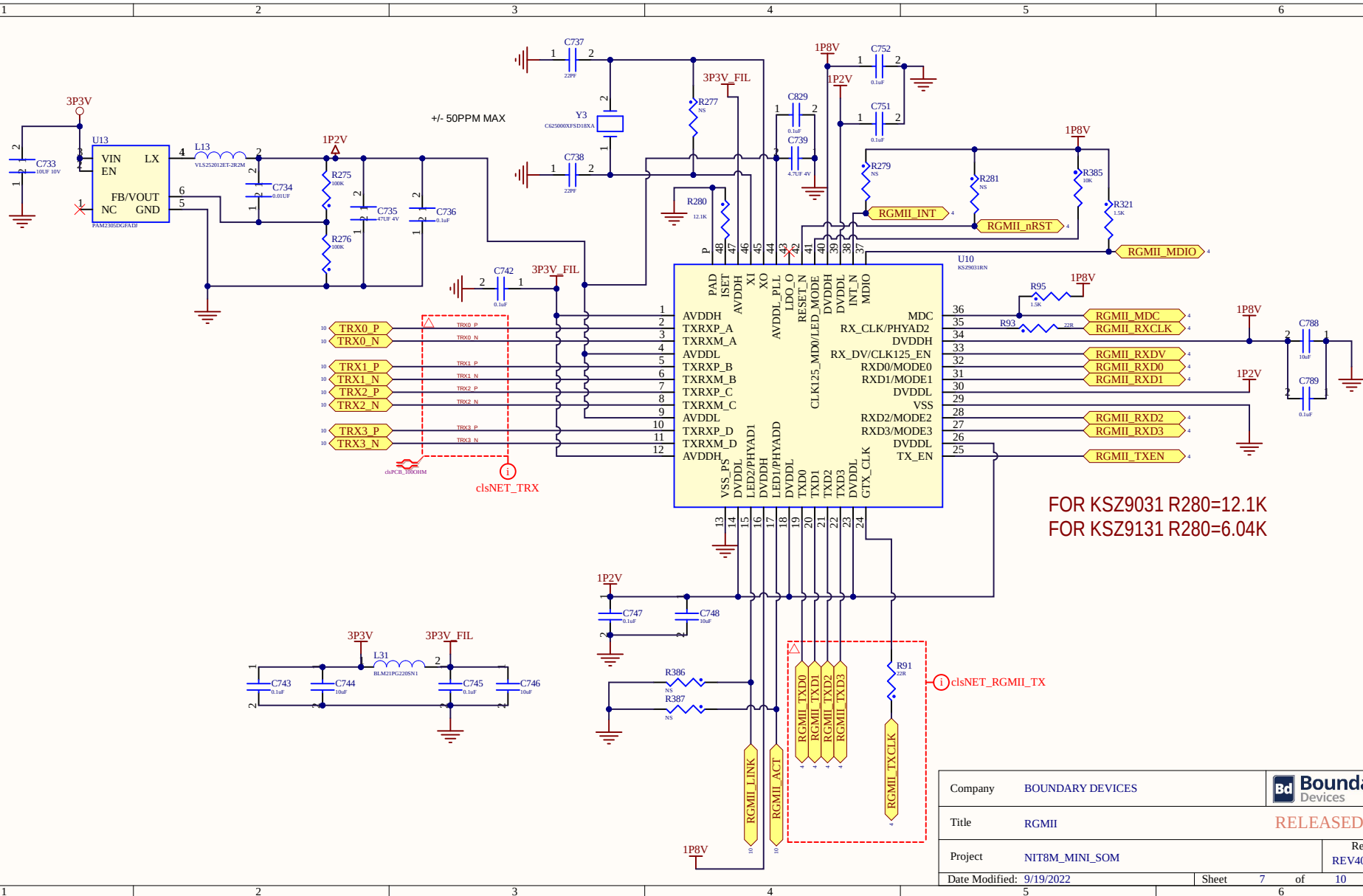
| Data Bus  |         | Command/Address |         |         |
|-----------|---------|-----------------|---------|---------|
| Pin Name  | LF00R4  | Pin Name        | LF00R4  | CDR4    |
| CDR4C0007 | SDR4_0  | CDR4C0007       | SDR4_0  | SDR4_0  |
| CDR4C0008 | SDR4_1  | CDR4C0008       | SDR4_1  | SDR4_1  |
| CDR4C0009 | SDR4_2  | CDR4C0009       | SDR4_2  | SDR4_2  |
| CDR4C0010 | SDR4_3  | CDR4C0010       | SDR4_3  | SDR4_3  |
| CDR4C0011 | SDR4_4  | CDR4C0011       | SDR4_4  | SDR4_4  |
| CDR4C0012 | SDR4_5  | CDR4C0012       | SDR4_5  | SDR4_5  |
| CDR4C0013 | SDR4_6  | CDR4C0013       | SDR4_6  | SDR4_6  |
| CDR4C0014 | SDR4_7  | CDR4C0014       | SDR4_7  | SDR4_7  |
| CDR4C0015 | SDR4_8  | CDR4C0015       | SDR4_8  | SDR4_8  |
| CDR4C0016 | SDR4_9  | CDR4C0016       | SDR4_9  | SDR4_9  |
| CDR4C0017 | SDR4_10 | CDR4C0017       | SDR4_10 | SDR4_10 |
| CDR4C0018 | SDR4_11 | CDR4C0018       | SDR4_11 | SDR4_11 |
| CDR4C0019 | SDR4_12 | CDR4C0019       | SDR4_12 | SDR4_12 |
| CDR4C0020 | SDR4_13 | CDR4C0020       | SDR4_13 | SDR4_13 |
| CDR4C0021 | SDR4_14 | CDR4C0021       | SDR4_14 | SDR4_14 |
| CDR4C0022 | SDR4_15 | CDR4C0022       | SDR4_15 | SDR4_15 |
| CDR4C0023 | SDR4_16 | CDR4C0023       | SDR4_16 | SDR4_16 |
| CDR4C0024 | SDR4_17 | CDR4C0024       | SDR4_17 | SDR4_17 |
| CDR4C0025 | SDR4_18 | CDR4C0025       | SDR4_18 | SDR4_18 |
| CDR4C0026 | SDR4_19 | CDR4C0026       | SDR4_19 | SDR4_19 |
| CDR4C0027 | SDR4_20 | CDR4C0027       | SDR4_20 | SDR4_20 |
| CDR4C0028 | SDR4_21 | CDR4C0028       | SDR4_21 | SDR4_21 |
| CDR4C0029 | SDR4_22 | CDR4C0029       | SDR4_22 | SDR4_22 |
| CDR4C0030 | SDR4_23 | CDR4C0030       | SDR4_23 | SDR4_23 |
| CDR4C0031 | SDR4_24 | CDR4C0031       | SDR4_24 | SDR4_24 |
| CDR4C0032 | SDR4_25 | CDR4C0032       | SDR4_25 | SDR4_25 |
| CDR4C0033 | SDR4_26 | CDR4C0033       | SDR4_26 | SDR4_26 |
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| CDR4C0036 | SDR4_29 | CDR4C0036       | SDR4_29 | SDR4_29 |
| CDR4C0037 | SDR4_30 | CDR4C0037       | SDR4_30 | SDR4_30 |
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| CDR4C0041 | SDR4_34 | CDR4C0041       | SDR4_34 | SDR4_34 |
| CDR4C0042 | SDR4_35 | CDR4C0042       | SDR4_35 | SDR4_35 |
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| CDR4C0044 | SDR4_37 | CDR4C0044       | SDR4_37 | SDR4_37 |
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| CDR4C0046 | SDR4_39 | CDR4C0046       | SDR4_39 | SDR4_39 |
| CDR4C0047 | SDR4_40 | CDR4C0047       | SDR4_40 | SDR4_40 |
| CDR4C0048 | SDR4_41 | CDR4C0048       | SDR4_41 | SDR4_41 |
| CDR4C0049 | SDR4_42 | CDR4C0049       | SDR4_42 | SDR4_42 |
| CDR4C0050 | SDR4_43 | CDR4C0050       | SDR4_43 | SDR4_43 |
| CDR4C0051 | SDR4_44 | CDR4C0051       | SDR4_44 | SDR4_44 |
| CDR4C0052 | SDR4_45 | CDR4C0052       | SDR4_45 | SDR4_45 |
| CDR4C0053 | SDR4_46 | CDR4C0053       | SDR4_46 | SDR4_46 |
| CDR4C0054 | SDR4_47 | CDR4C0054       | SDR4_47 | SDR4_47 |
| CDR4C0055 | SDR4_48 | CDR4C0055       | SDR4_48 | SDR4_48 |
| CDR4C0056 | SDR4_49 | CDR4C0056       | SDR4_49 | SDR4_49 |
| CDR4C0057 | SDR4_50 | CDR4C0057       | SDR4_50 | SDR4_50 |
| CDR4C0058 | SDR4_51 | CDR4C0058       | SDR4_51 | SDR4_51 |
| CDR4C0059 | SDR4_52 | CDR4C0059       | SDR4_52 | SDR4_52 |
| CDR4C0060 | SDR4_53 | CDR4C0060       | SDR4_53 | SDR4_53 |
| CDR4C0061 | SDR4_54 | CDR4C0061       | SDR4_54 | SDR4_54 |
| CDR4C0062 | SDR4_55 | CDR4C0062       | SDR4_55 | SDR4_55 |
| CDR4C0063 | SDR4_56 | CDR4C0063       | SDR4_5  |         |











|                |                  |                 |
|----------------|------------------|-----------------|
| Company        | BOUNDARY DEVICES |                 |
| Title          | RGMII            |                 |
| Project        | NIT8M_MINI_SOM   | Rev<br>REV40A-R |
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