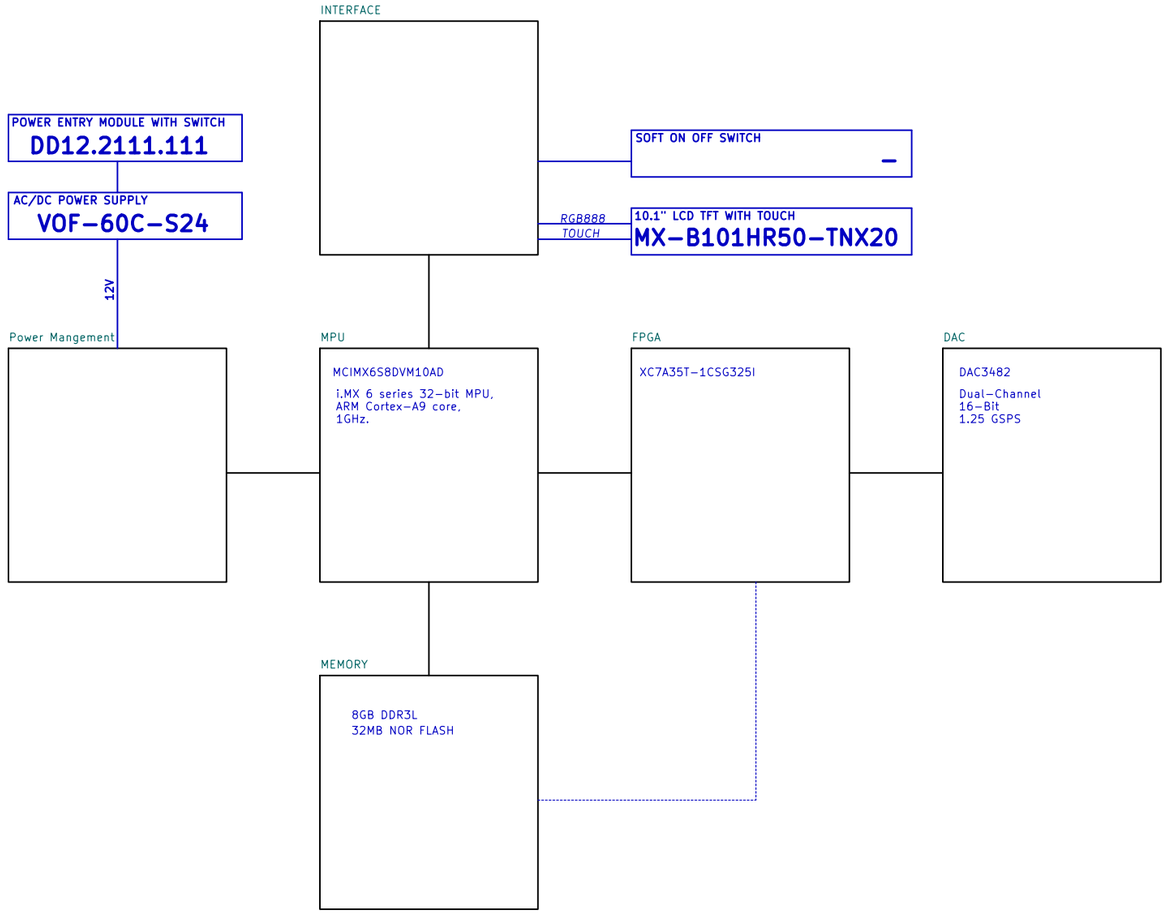
# AWG1000 BLOCK DIAGRAM

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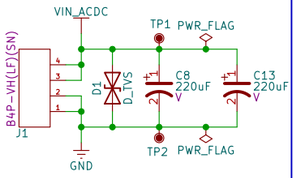
File: AWG1000.kicad_sch

**Title: AWG100 MB**

| | | |
|---|---|---|
| Size: A3 | Date: 2021-08-13 | **Rev: 1.0** |
| KiCad E.D.A. kicad (5.99.0-11430-ge61b1f03b8) | | Id: 1/7 |

## POWER INPUT

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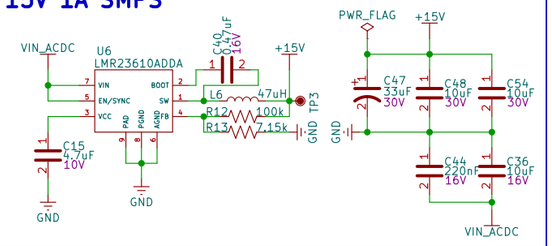


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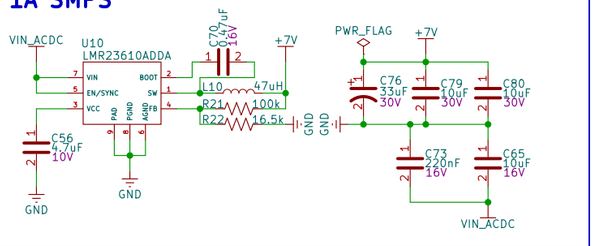


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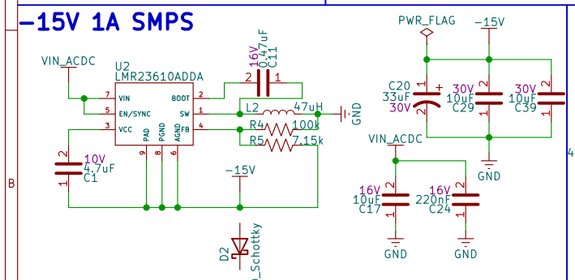


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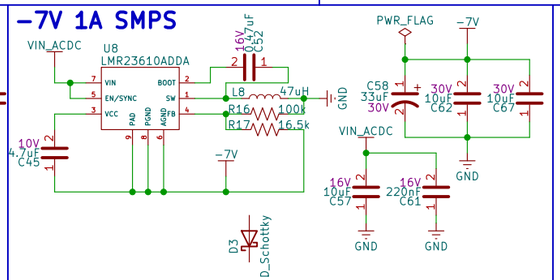


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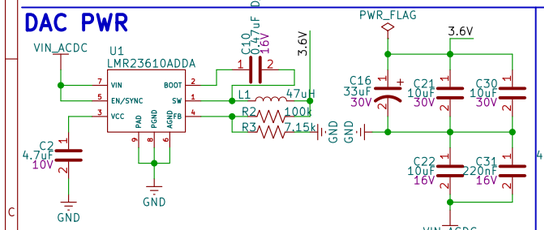


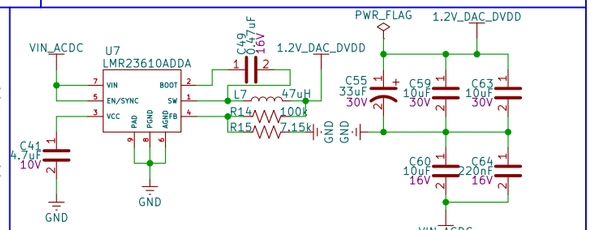


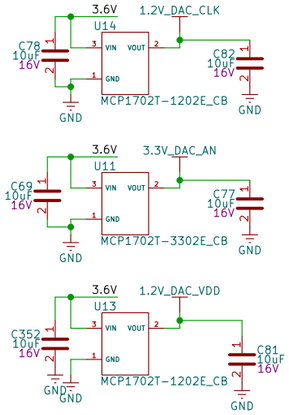


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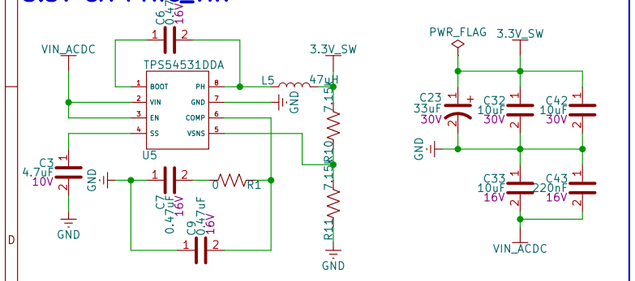


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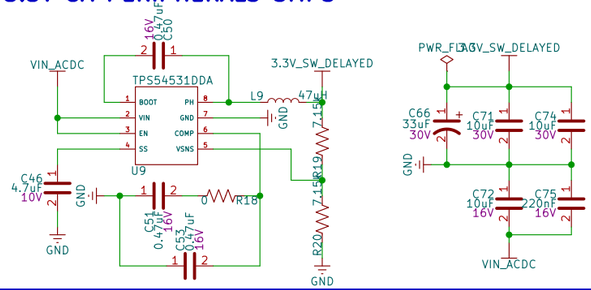


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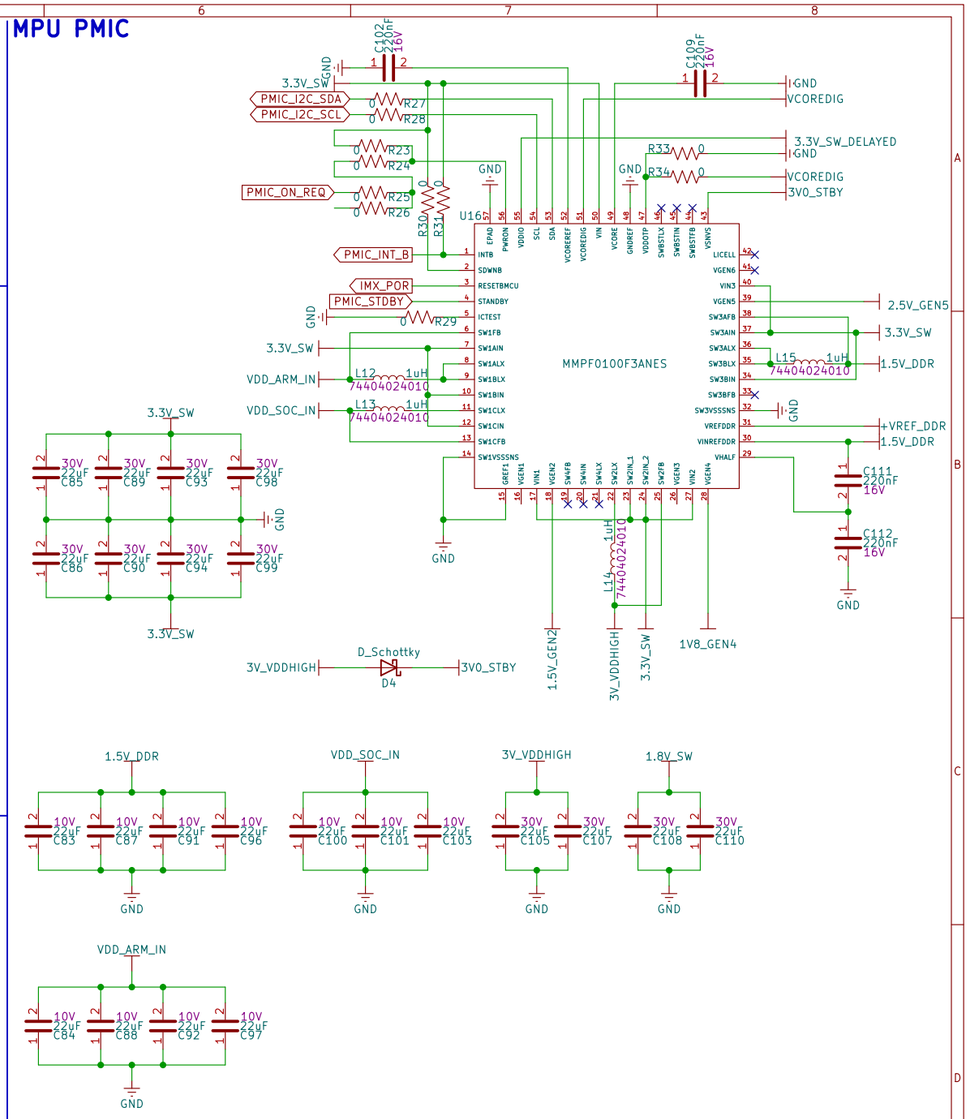


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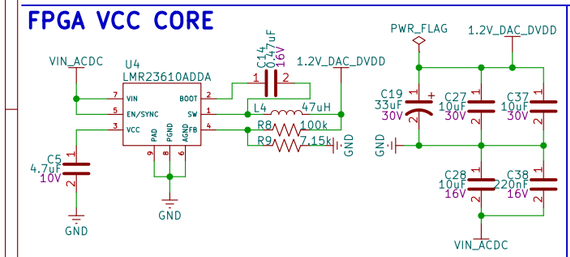


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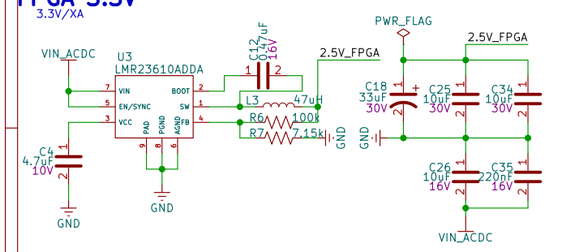


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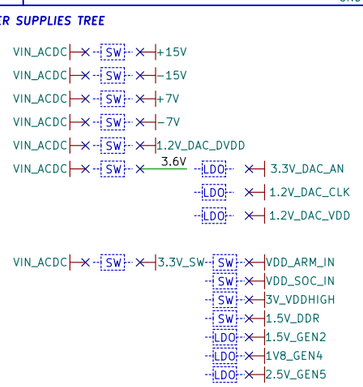


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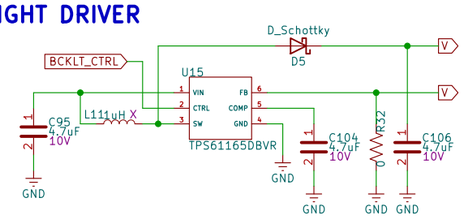


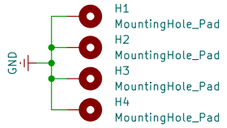


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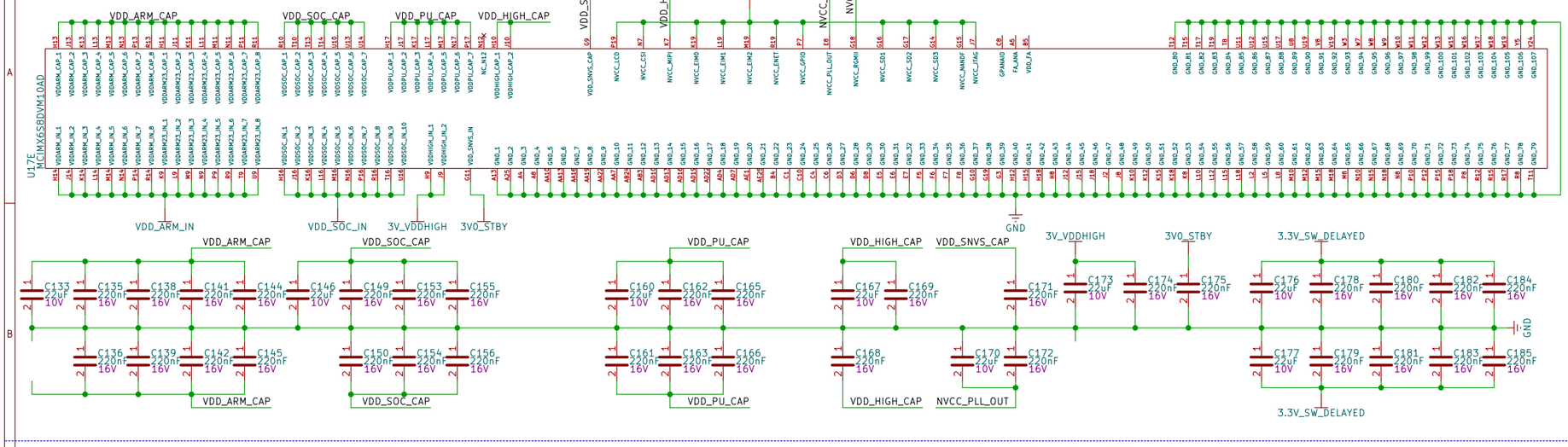
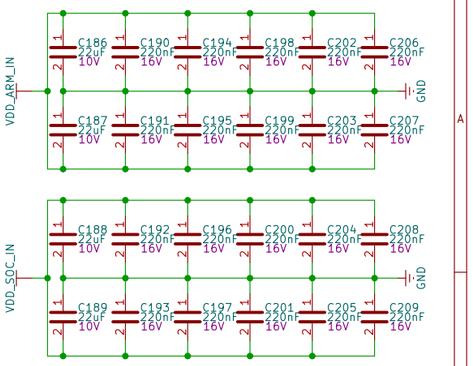
| KiCad E.D.A. kicad (5.99.0-11430-ge61b1f03b8) | | Id: 2/7 |

## MPU POWER & BYPASS CAPS

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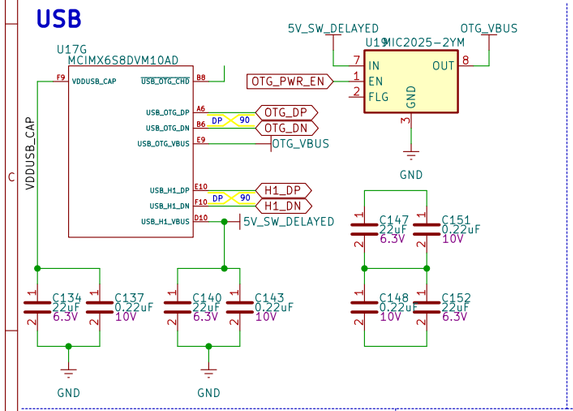


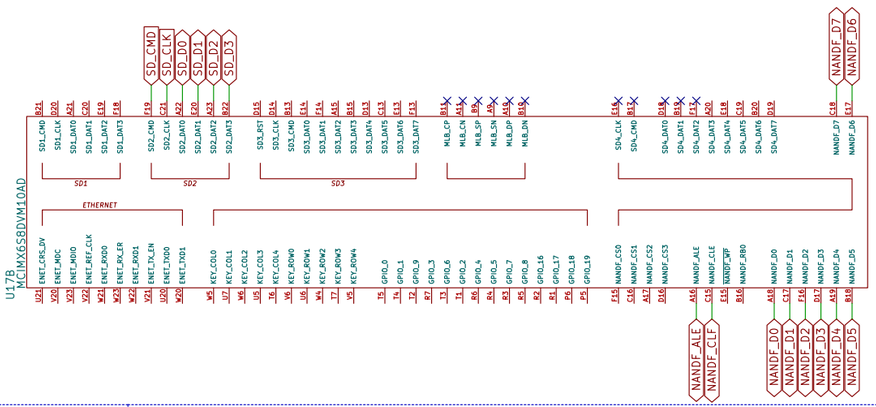


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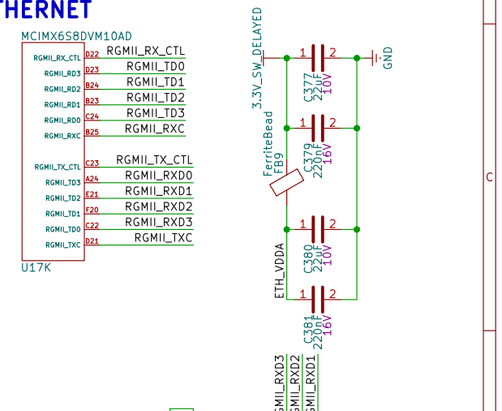


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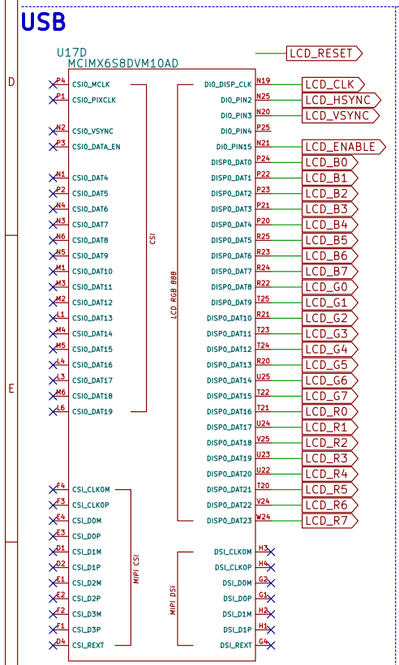


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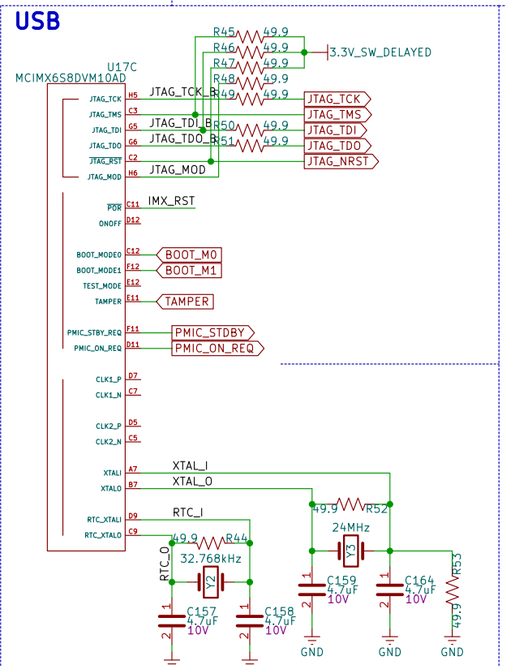


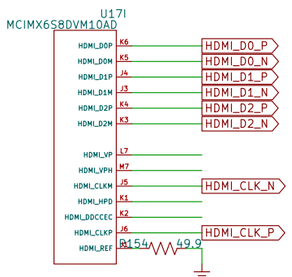


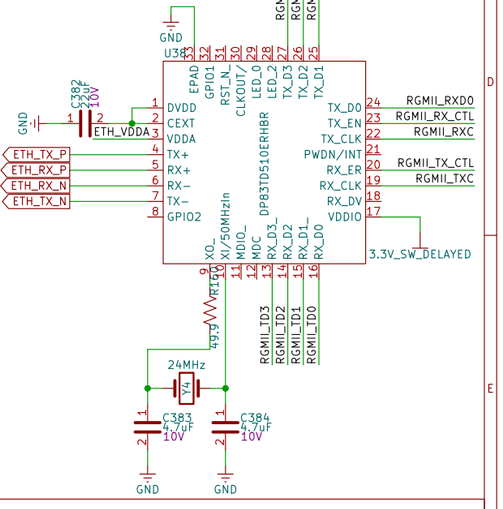


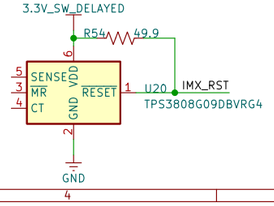


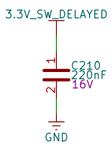


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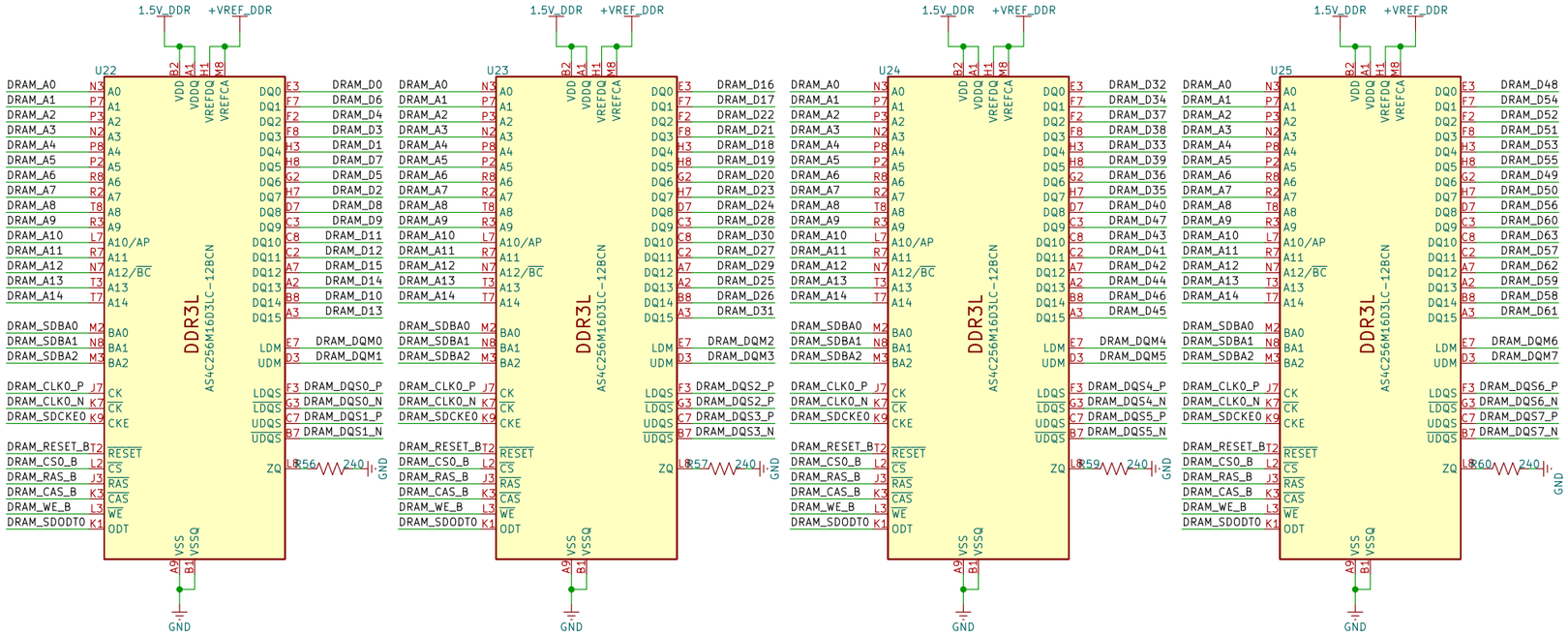
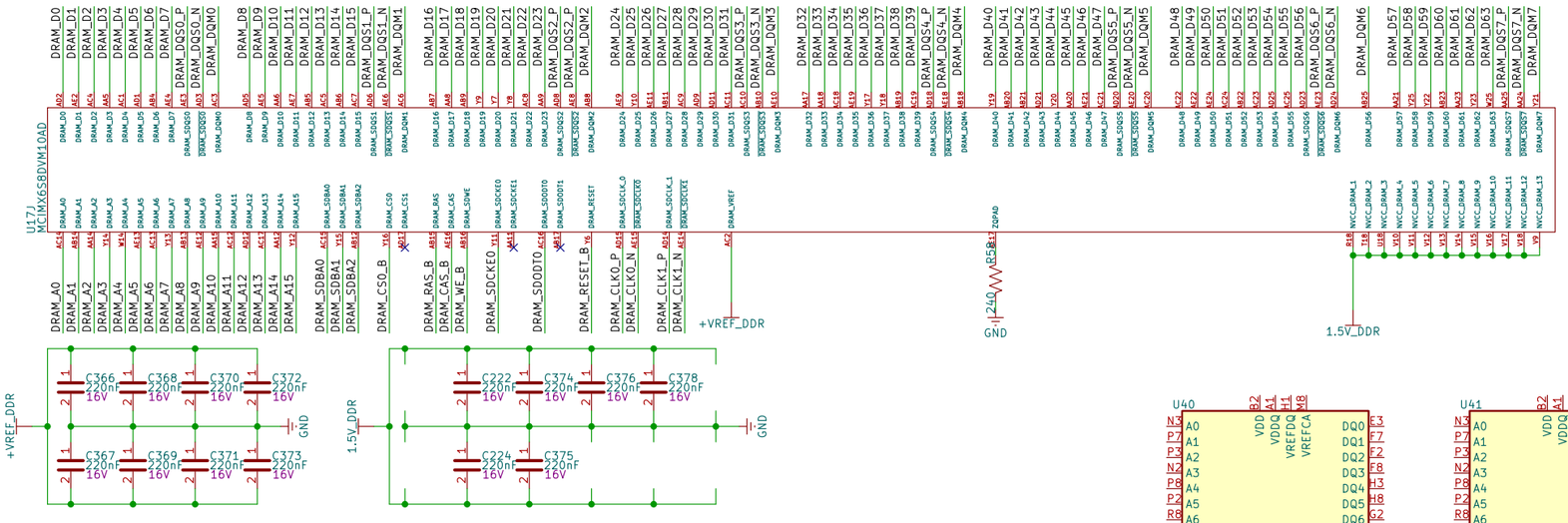
| KiCad E.D.A. kicad (5.99.0-11430-ge61b1f03b8) | | Id: 3/7 |

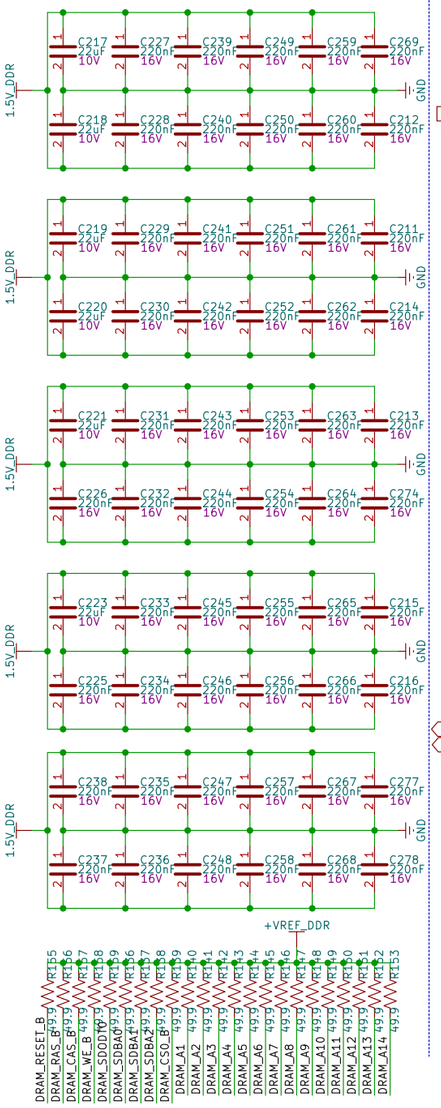
# MPU DDR3L RAM 2 GIGABYTES



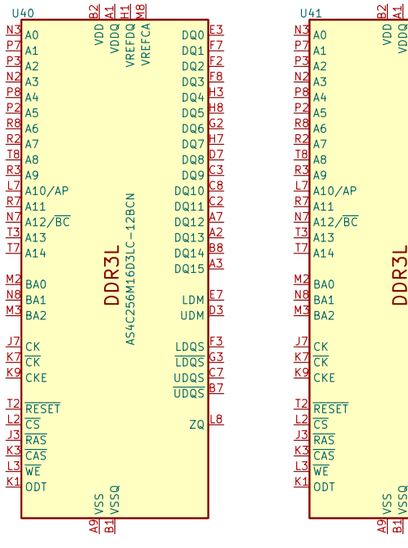










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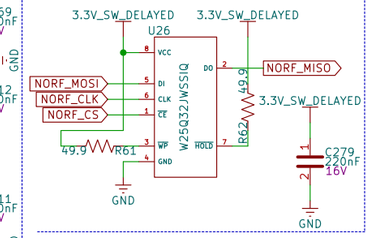


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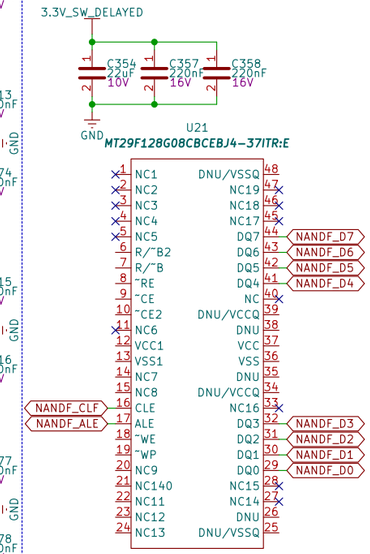


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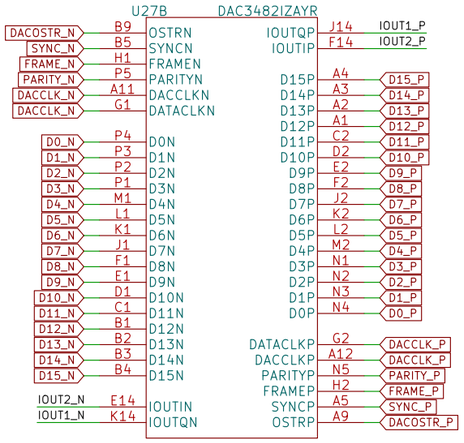
| KiCad E.D.A. kicad (5.99.0-11430-ge61b1f03b8) | | Id: 4/7 |

## DAC I/O

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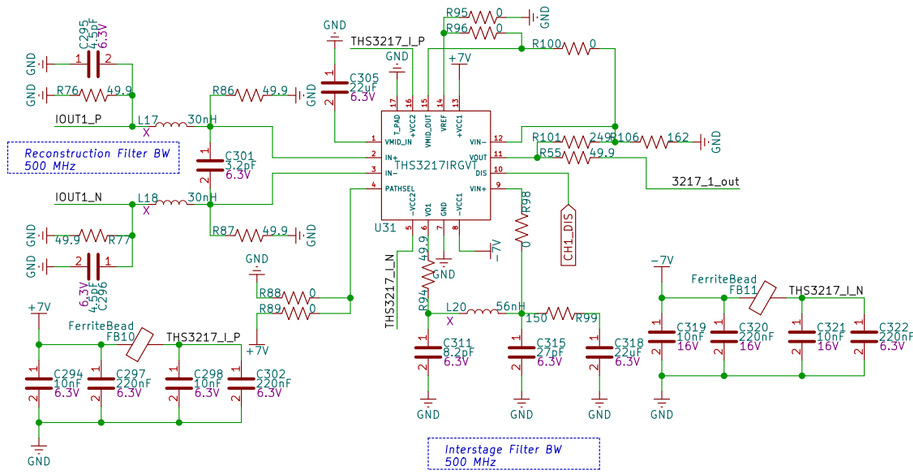


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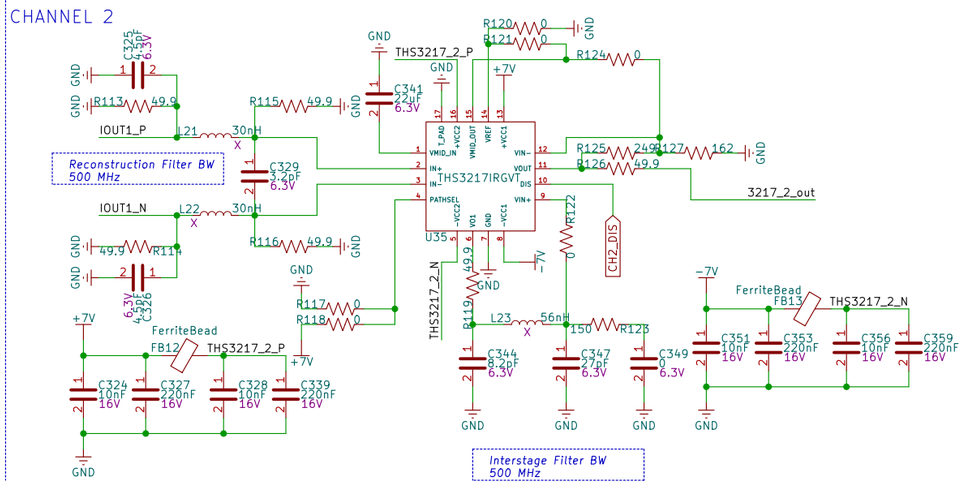


## OUTPUT DRIVE OPAMPS

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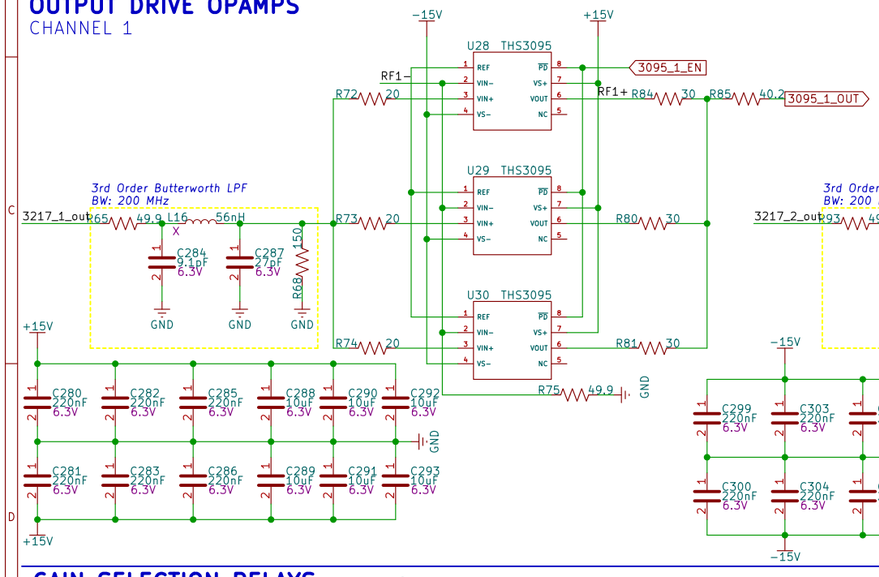


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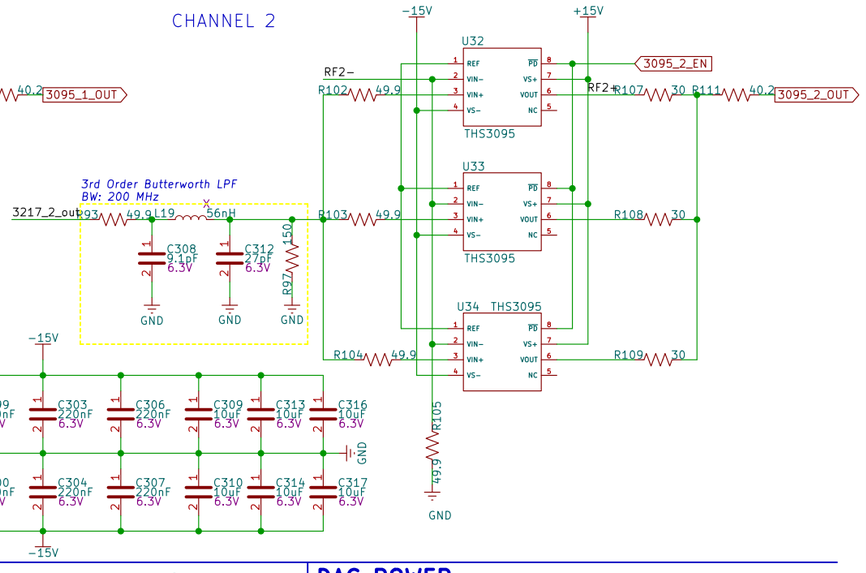


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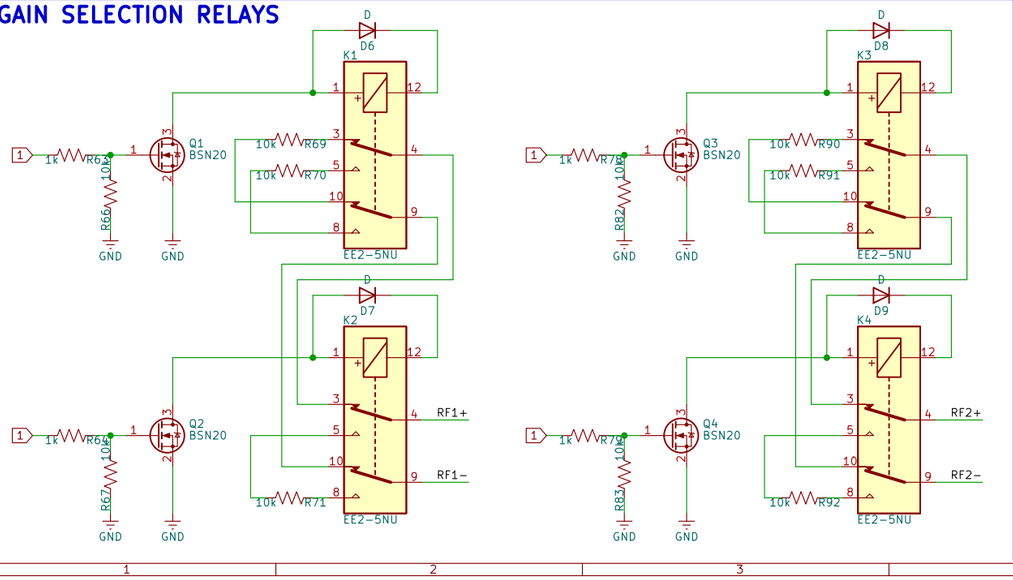


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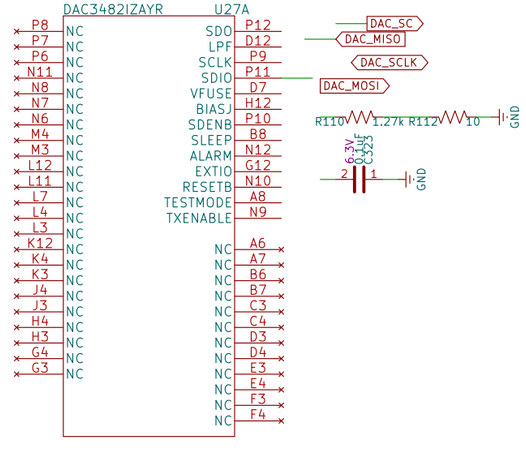


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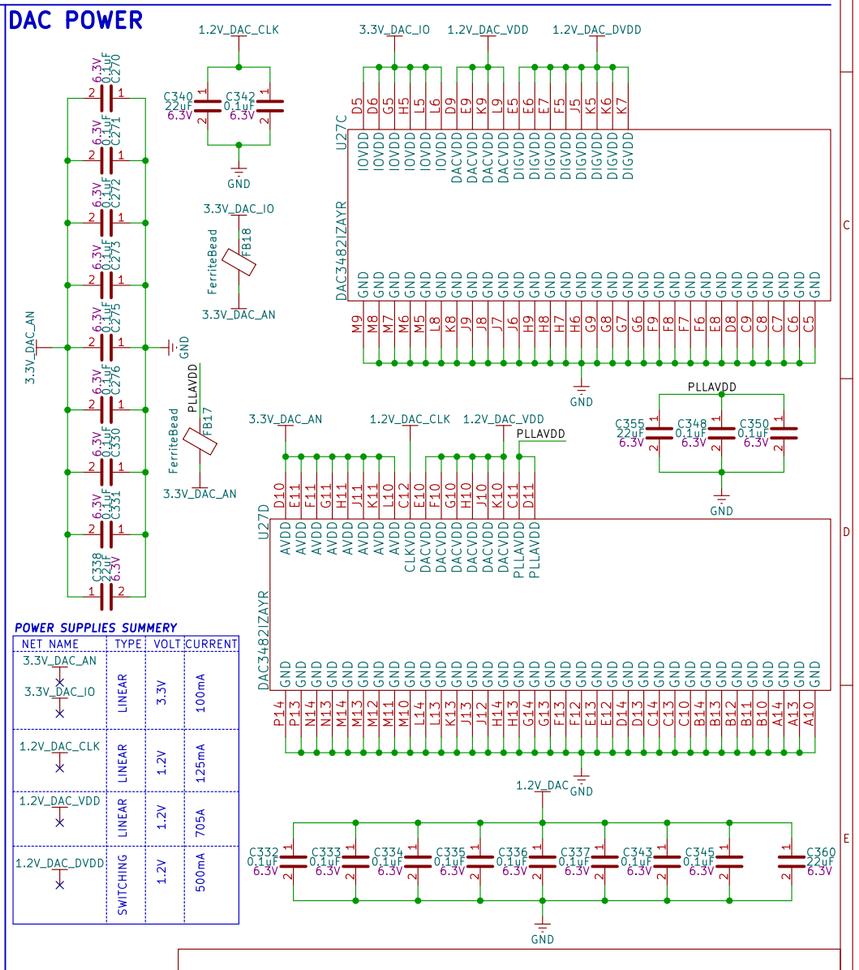


### POWER SUPPLIES SUMMERY

| NET_NAME | TYPE | VOLT | CURRENT |
|---|---|---|---|
| 3.3V_DAC_AN<br>3.3V_DAC_IO | LINEAR | 3.3V | 100mA |
| 1.2V_DAC_CLK | LINEAR | 1.2V | 125mA |
| 1.2V_DAC_VDD | LINEAR | 1.2V | 705A |
| 1.2V_DAC_DVDD | SWITCHING | 1.2V | 500mA |

| | | |
|---|---|---|
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| Size: A3 | Date: | **Rev:** |
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# CLOCK GENERATOR

U36D LFE3-35EA-7FN484I

U36E LFE3-35EA-7FN484I

U36C LFE3-35EA-7FN484I

U36B LFE3-35EA-7FN484I

U36A LFE3-35EA-7FN484I

U18 CDCE62005RGZR

H1_DP
H1_DN
1.2V_DAC_DVDD
1.2V_DAC_DVDD
GND
FPGACLK_N
FPGACLK_P
D13_P
D13_N
D14_N
D14_P
SYNC_N
SYNC_P
D12_N
D11_N
D11_P
D10_N
D9_N
D9_P
D8_N
D8_P
D10_P
D12_P
D6_N
D7_P
D7_N
D6_P
D3_N
D3_P
D15_P
D15_P
D2_N
D2_P
D5_N
D0_P
D0_N
D5_P
D1_N
D4_N
D1_P
D4_P
+3.3V_CLK
FB2 FerriteBead
FB3 FerriteBead
FB4 FerriteBead
FB5 FerriteBead
FB6 FerriteBead
FB7 FerriteBead
FB8 FerriteBead
FB1 FerriteBead
C114 4.7uF 10V
C115 4.7uF 10V
C116 4.7uF 10V
C117 4.7uF 10V
C118 4.7uF 10V
C120 0.1uF 6.3V
C121 0.1uF 6.3V
C122 0.1uF 6.3V
C123 0.1uF 6.3V
C124 0.1uF 6.3V
C125 0.1uF 6.3V
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C128 0.1uF 6.3V
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C385 6.3V
C386 6.3V
C387 0.1uF 6.3V
C388 0.1uF 6.3V
C131 0.1uF 6.3V
C132 0.1uF 6.3V
C113 4.7uF 10V
C119 0.1uF 6.3V
C126 0.1uF 6.3V
R166 49.9
R167 49.9
R168 49.9
R162 49.9
R165 49.9
R164 49.9
R165 49.9
R37 49.9
R38 49.9
R169 49.9
R170 49.9
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R173 49.9
R39 49.9
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R35 49.9
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DAC_CLK_N
DAC_CLK_P
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DACCLK_N
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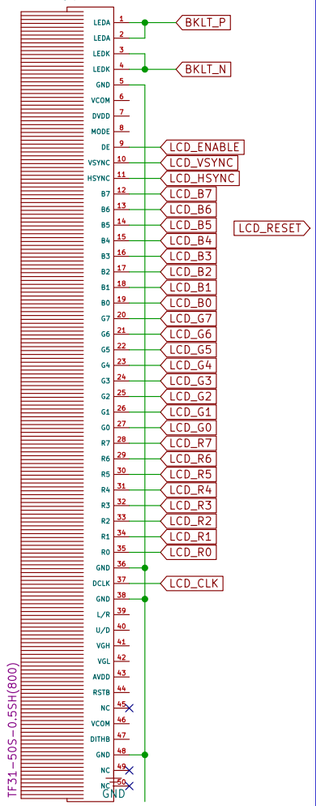


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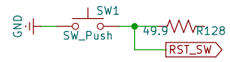
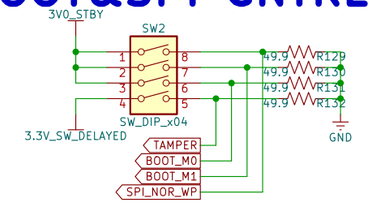
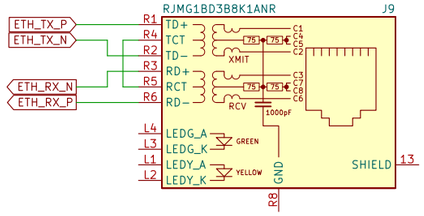


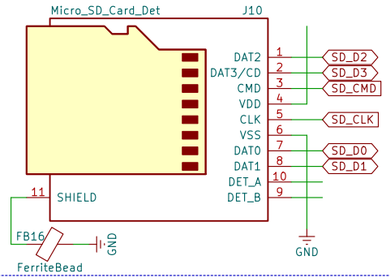

# BOOT&SPI CNTRL




# ETHERNET

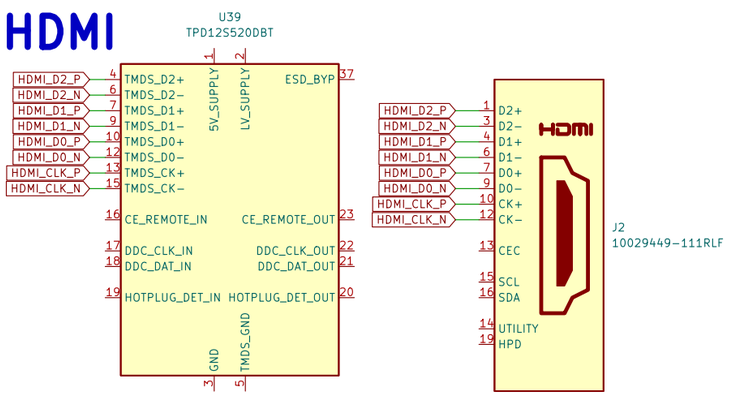



# SD CARD

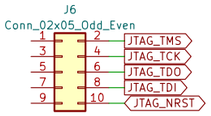



# ON/OFF SWITCH

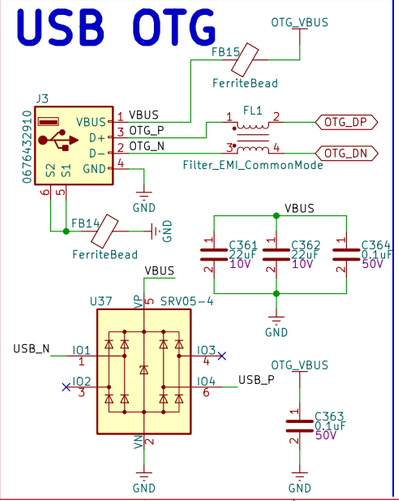
# HDMI



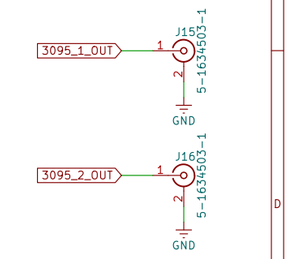

# TOUCH I2C



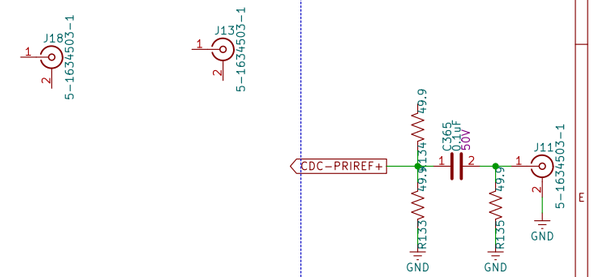

# USB OTG




# BNC CONNECTORS




## EXTERNAL REF. I/O

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