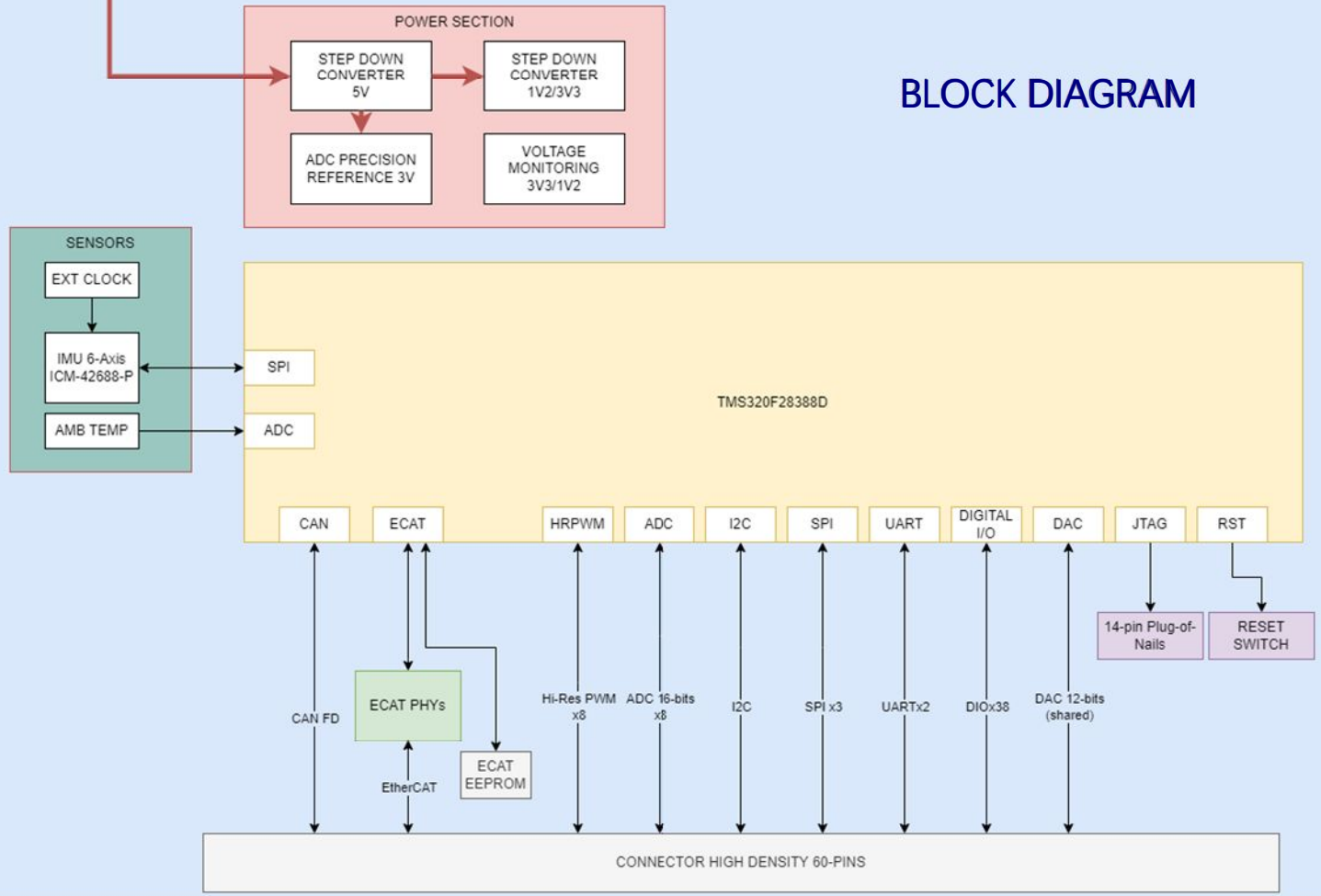


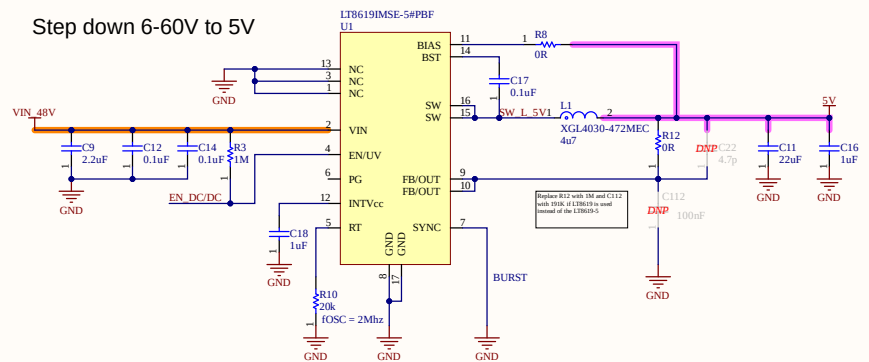
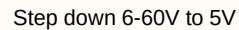
F28388D\_ECAT\_Node

REV1.1

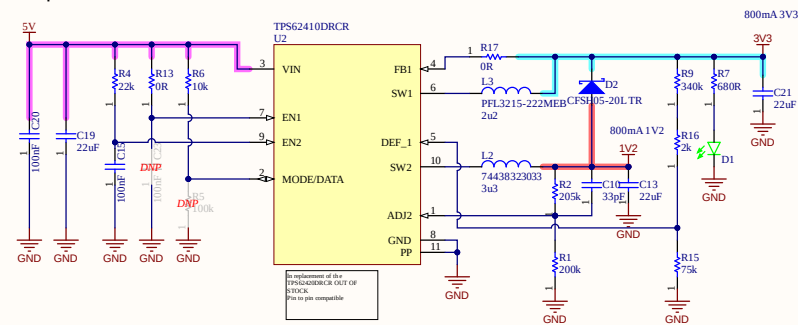
| Page | Index                |
|------|----------------------|
| 1    | COVER PAGE           |
| 2    | BLOCK DIAGRAM        |
| 3    | POWER                |
| 4    | F2838 GPIO           |
| 5    | F2838 JTAG CLOCK SUP |
| 6    | F2838 ADC            |
| 7    | ETHERCAT             |
| 8    | SENSORS              |
| 9    | CONNECTORS MECH      |

# BLOCK DIAGRAM

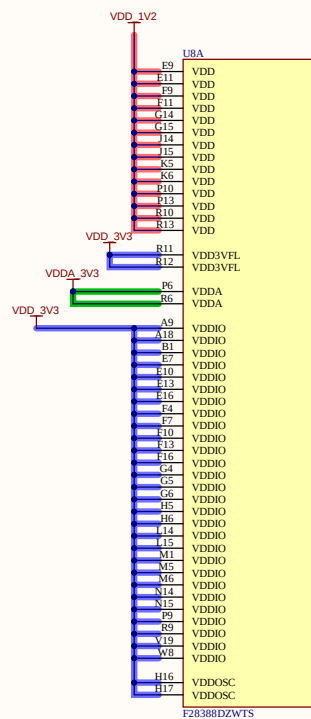
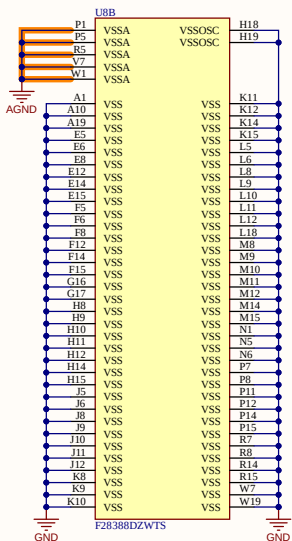




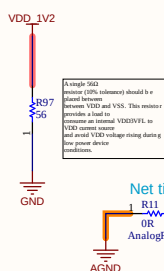
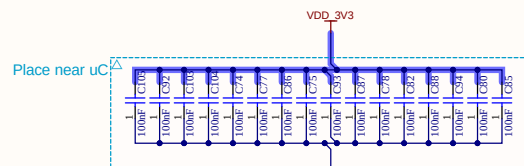
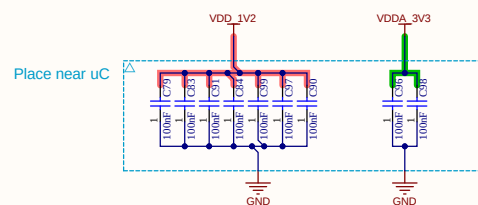
Step down 1V2 and 3V3 - 800mA



## F28388D Power pins

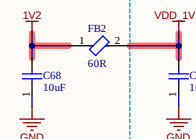
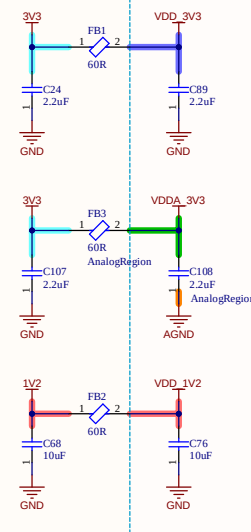


## Decoupling Capacitors

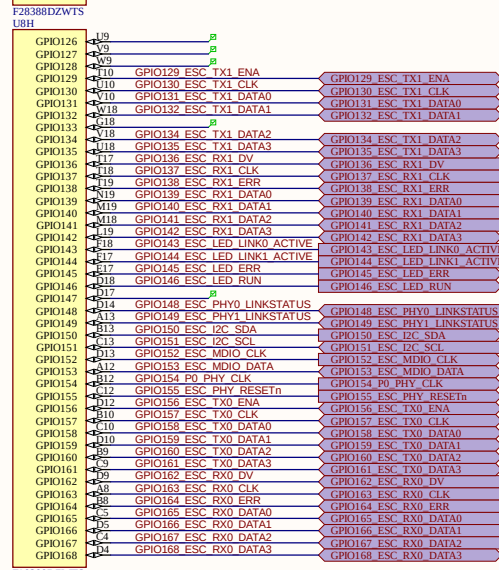
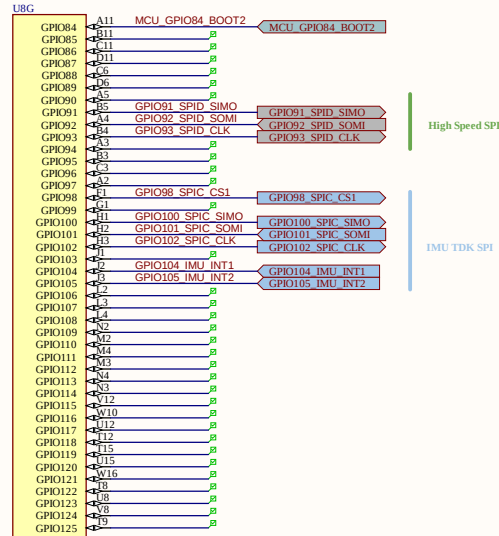
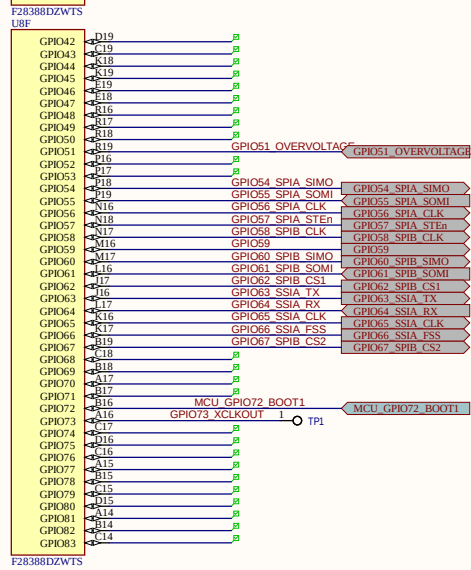
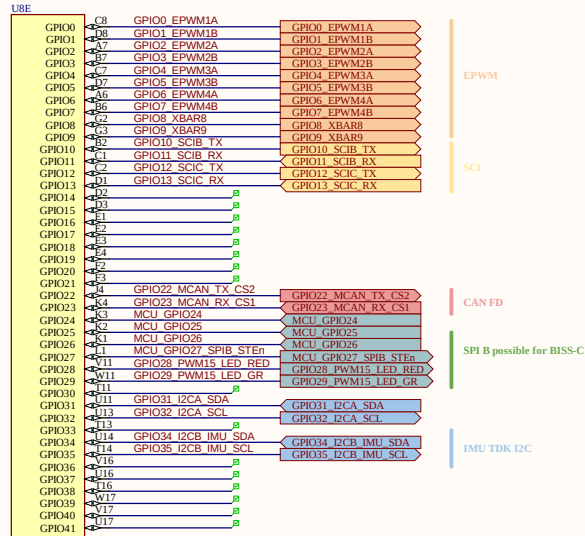


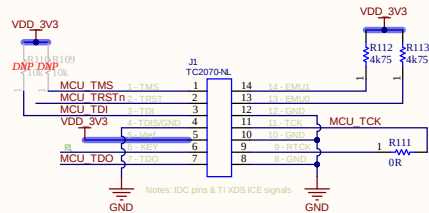
## Ferrite Beads

Place near uC

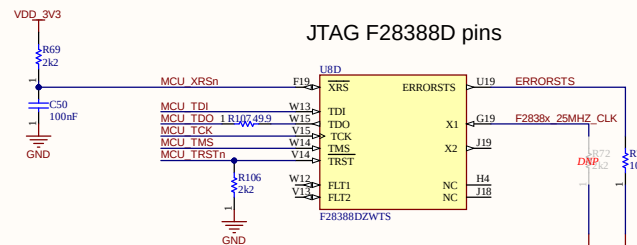


# F28388D GPIO pins

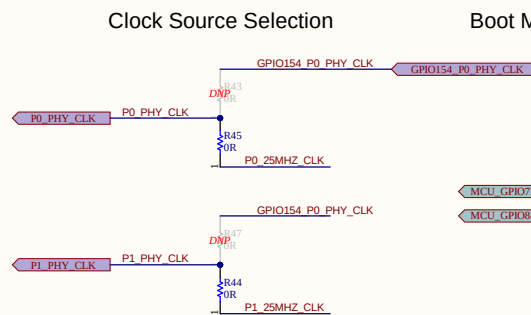




**JTAG connector**  
TMS320-XDS100-V3+TC2070-IDC-NL

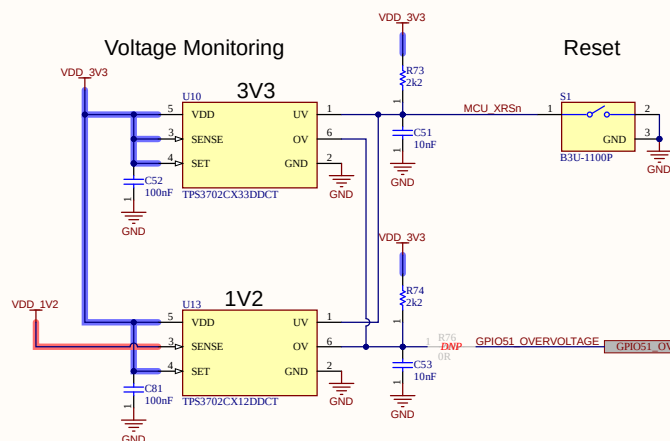


**JTAG F28388D pins**



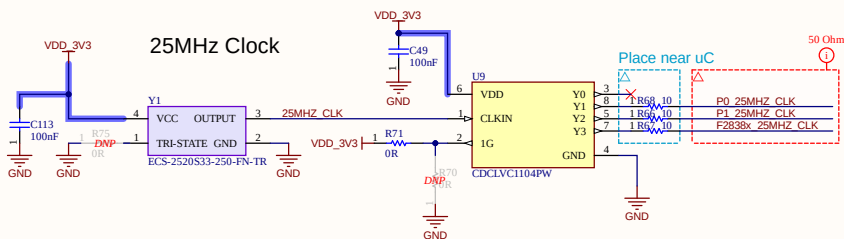
**Clock Source Selection**

**Boot Mode Selection Switch**



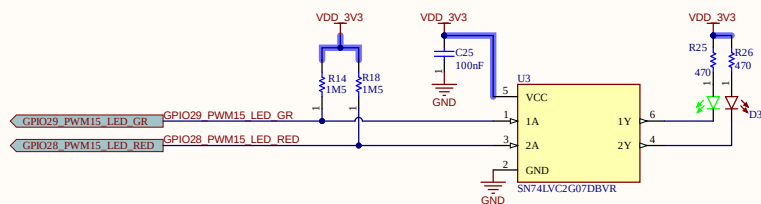
**Voltage Monitoring**

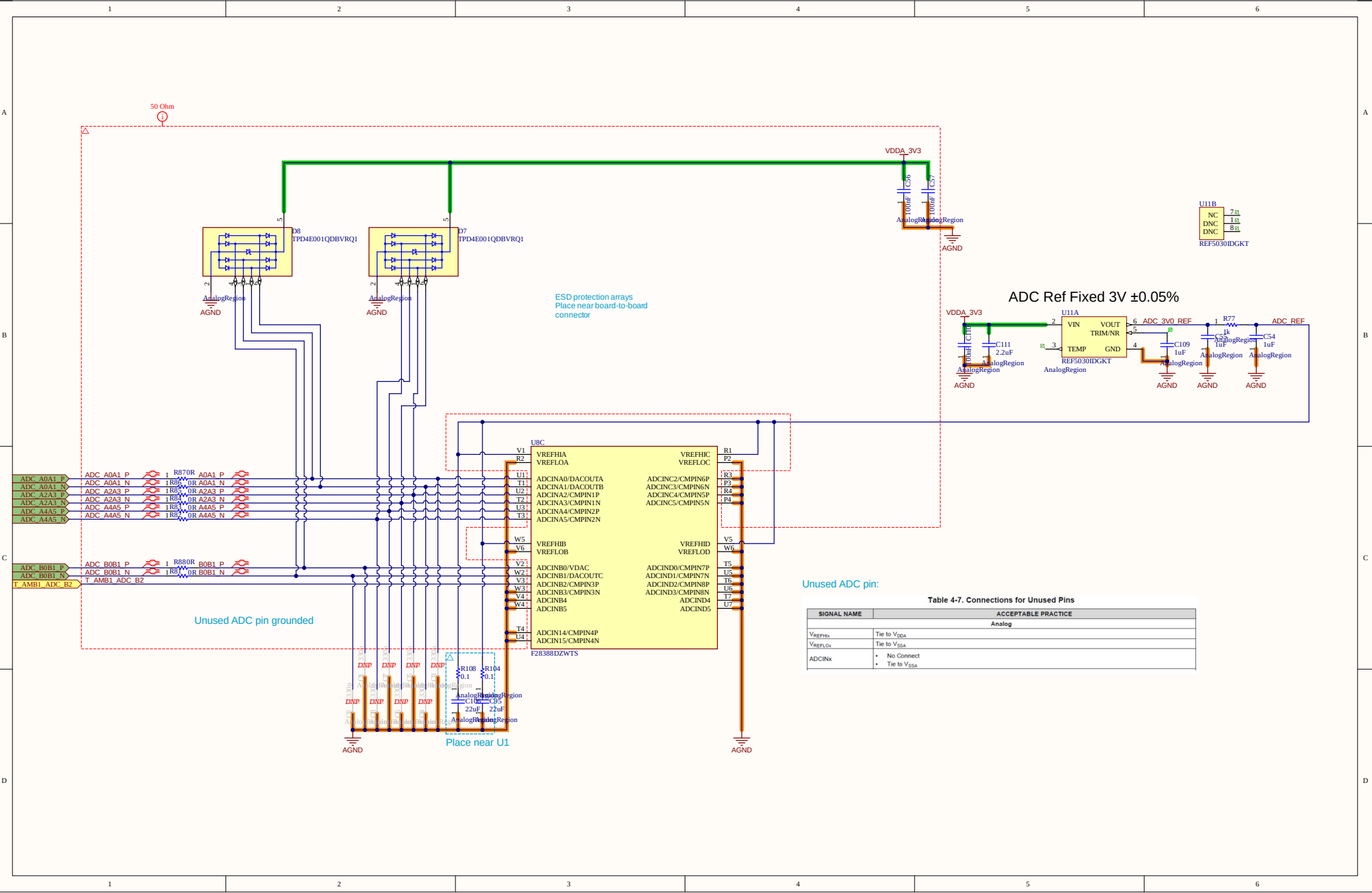
**Reset**

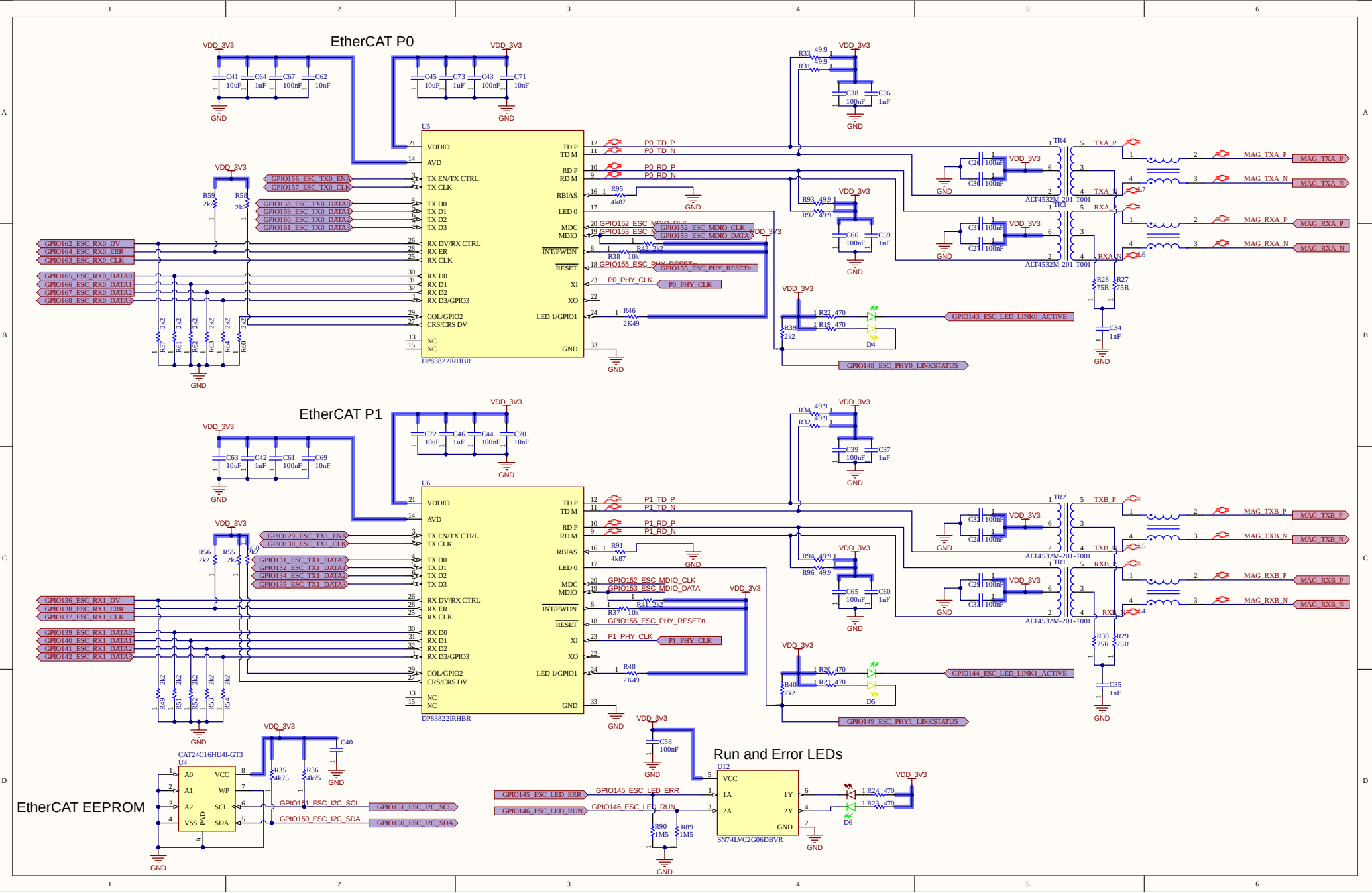


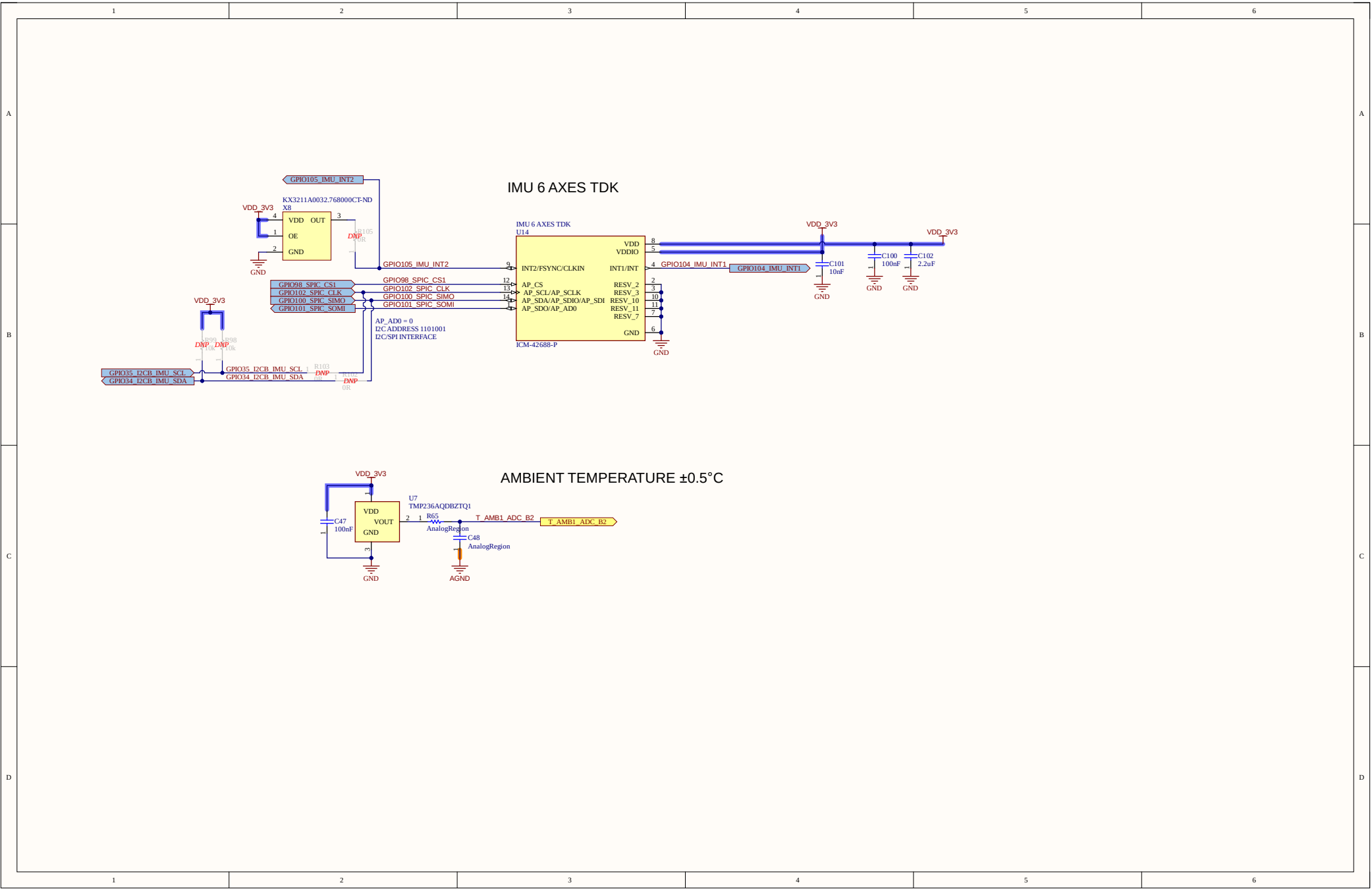
**25MHz Clock**

**LEDS PWM**











| 6.0 HIGH SPEED PERFORMANCE                                                      |                        |                             |
|---------------------------------------------------------------------------------|------------------------|-----------------------------|
| 6.1 Based on a 3 dB insertion loss                                              |                        |                             |
| Stack Height                                                                    | Single-Ended Signaling | Differential Pair Signaling |
| 5mm                                                                             | 9.5 GHz / 19 Gbps      | 10.5 GHz / 21 Gbps          |
| 6.2 System Impedance: 50 ohm for single-ended and 100 ohm for differential pair |                        |                             |

High Speed Socket Strip 60 POS  
the blade and beam design of the QSH delivers 25 Gbps performance

