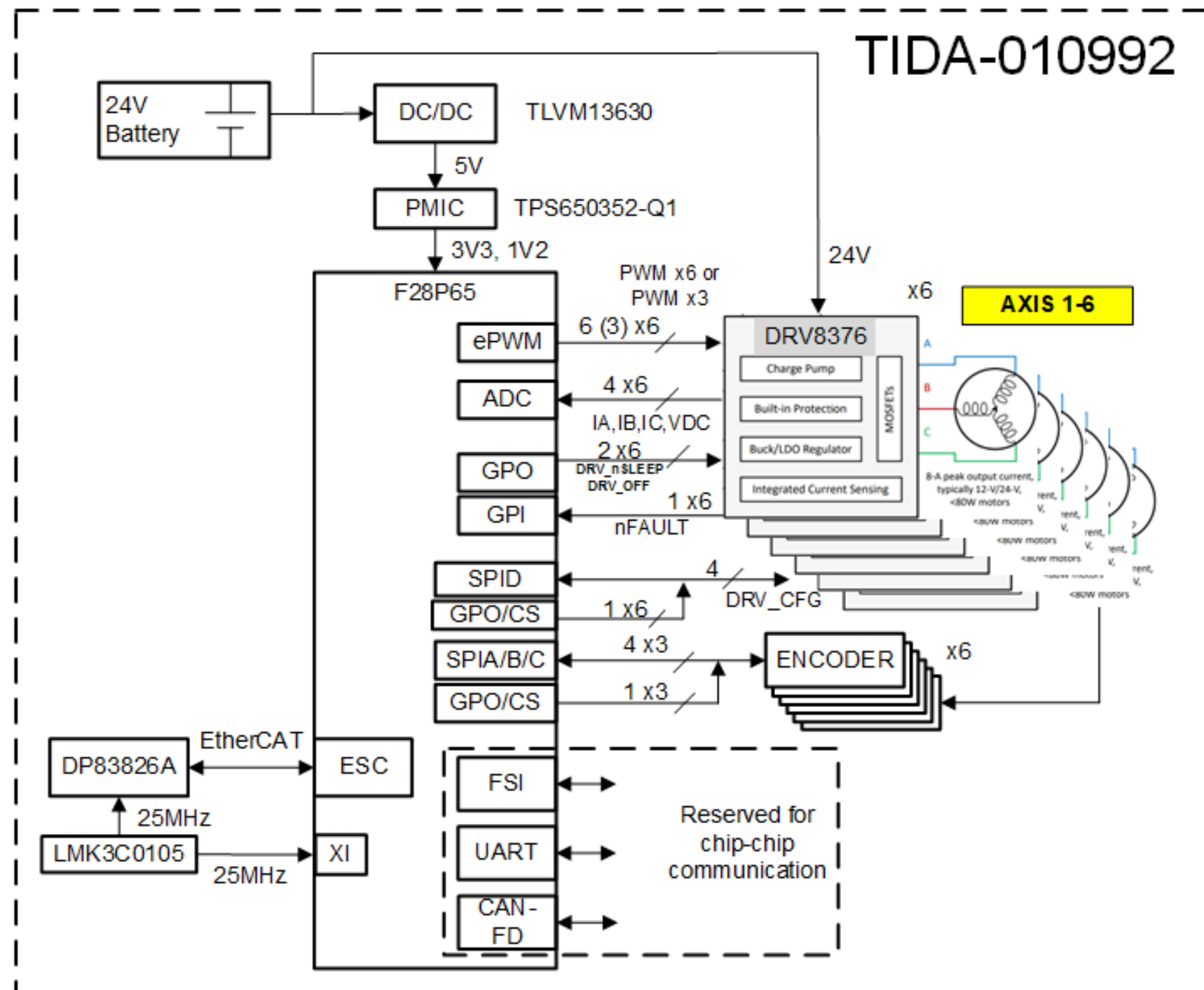


Revision History

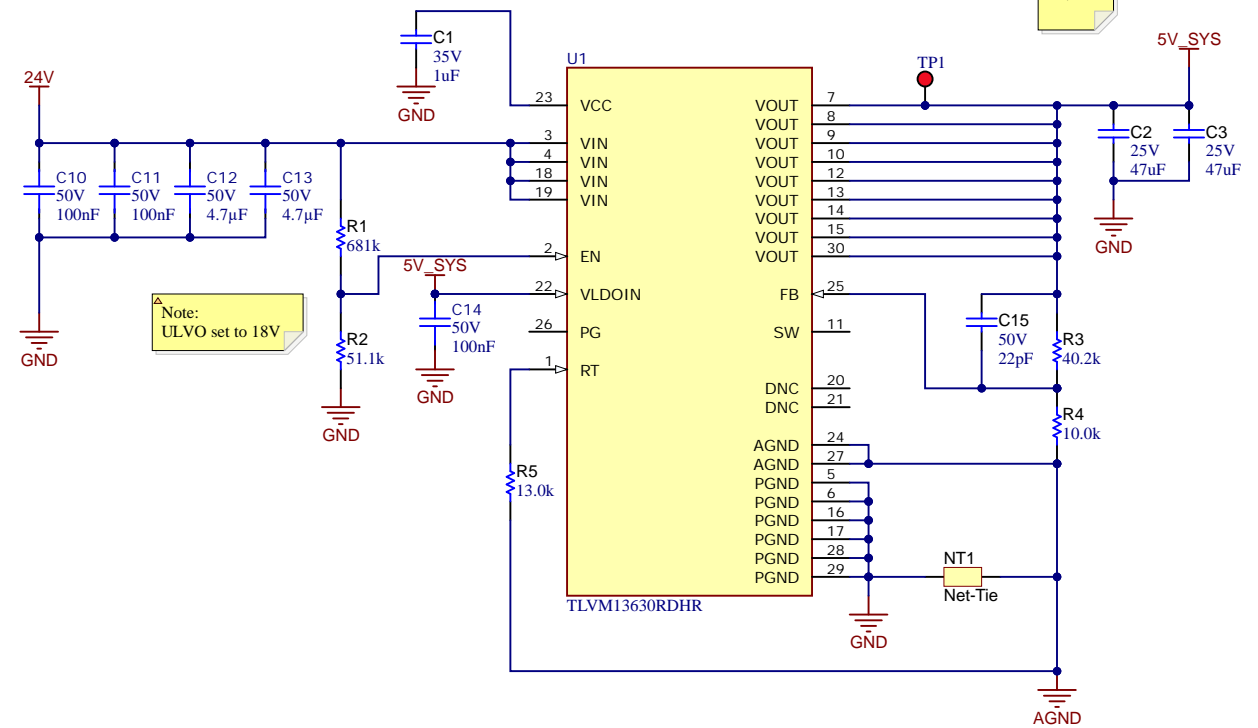
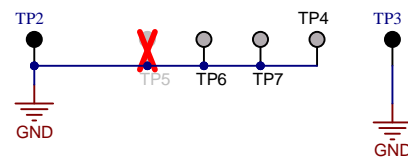
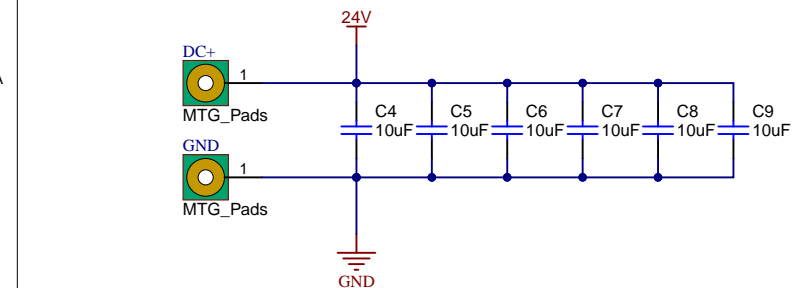
Rev	ECN #	Approved Date	Approved by	Notes
N/A	N/A	N/A	N/A	N/A



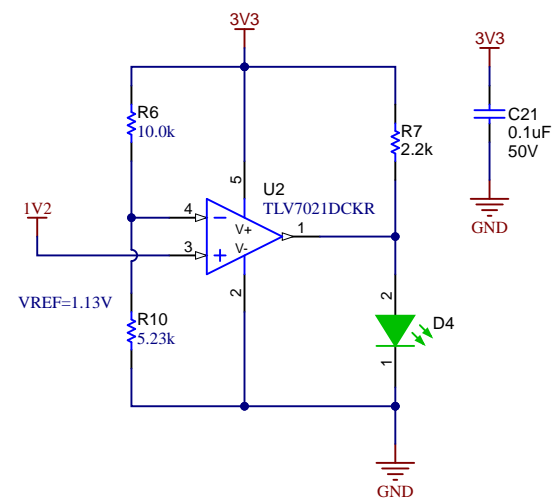
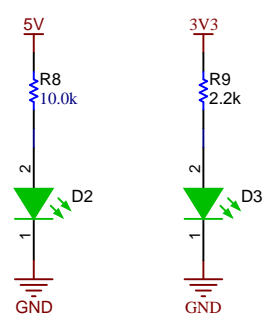
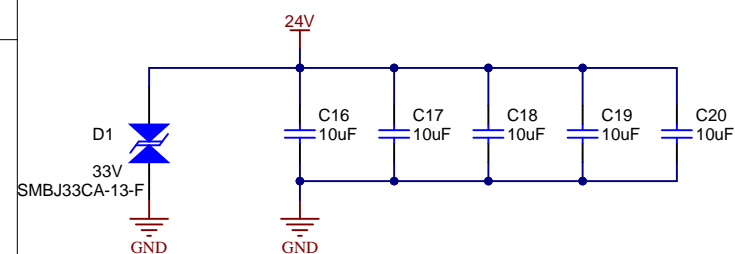
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Orderable: <a href="#">ChangeMe in variant</a>	Designed for: <a href="#">Public Release</a>	Mod. Date: 11/6/2025
TID #: <a href="#">TIDA-010992</a>	Project Title: <a href="#">TIDA-010992</a>	
Number: <a href="#">TIDA-010992</a>   Rev: <a href="#">E1</a>	Sheet Title:	
SVN Rev: <a href="#">Not in version control</a>	Assembly Variant: <a href="#">001</a>	Sheet: <a href="#">1</a> of <a href="#">13</a>
Drawn By: <a href="#">Chen Gao</a>	File: <a href="#">TIDA-010992_01_CoverSheet.SchDoc</a>	Size: <a href="#">B</a>
Engineer: <a href="#">Chen Gao</a>	Contact: <a href="#">http://www.ti.com/support</a>	

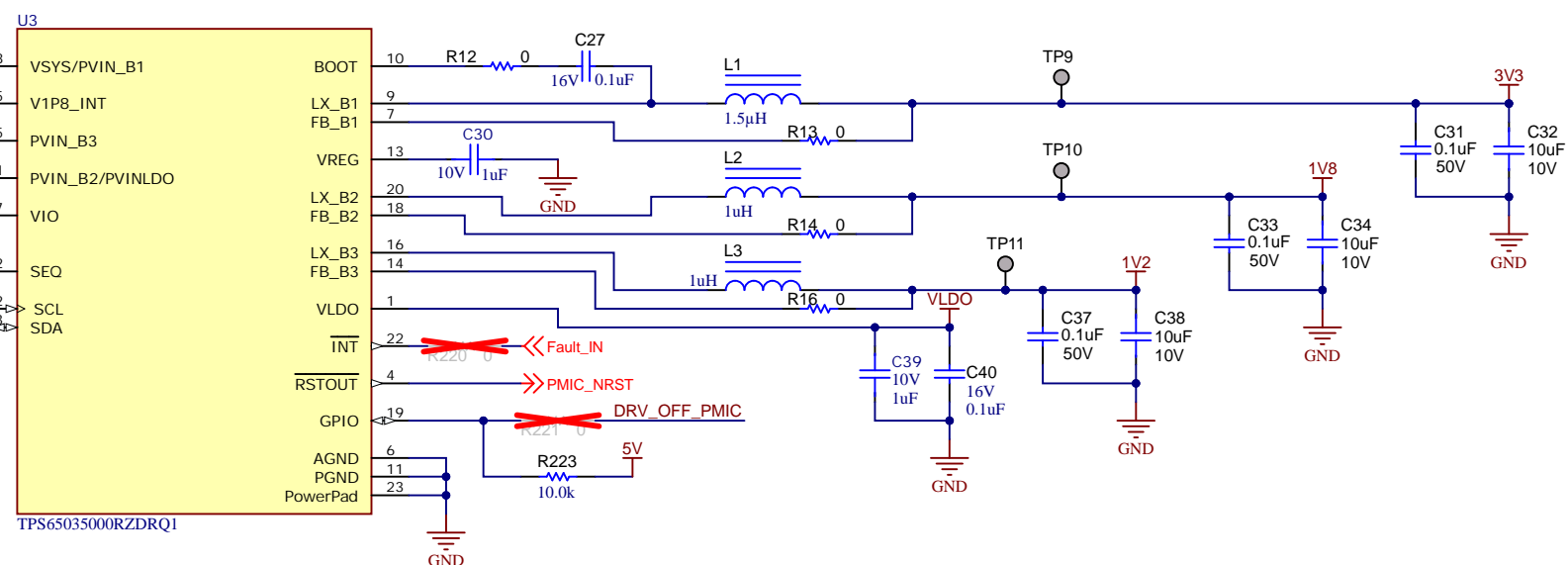
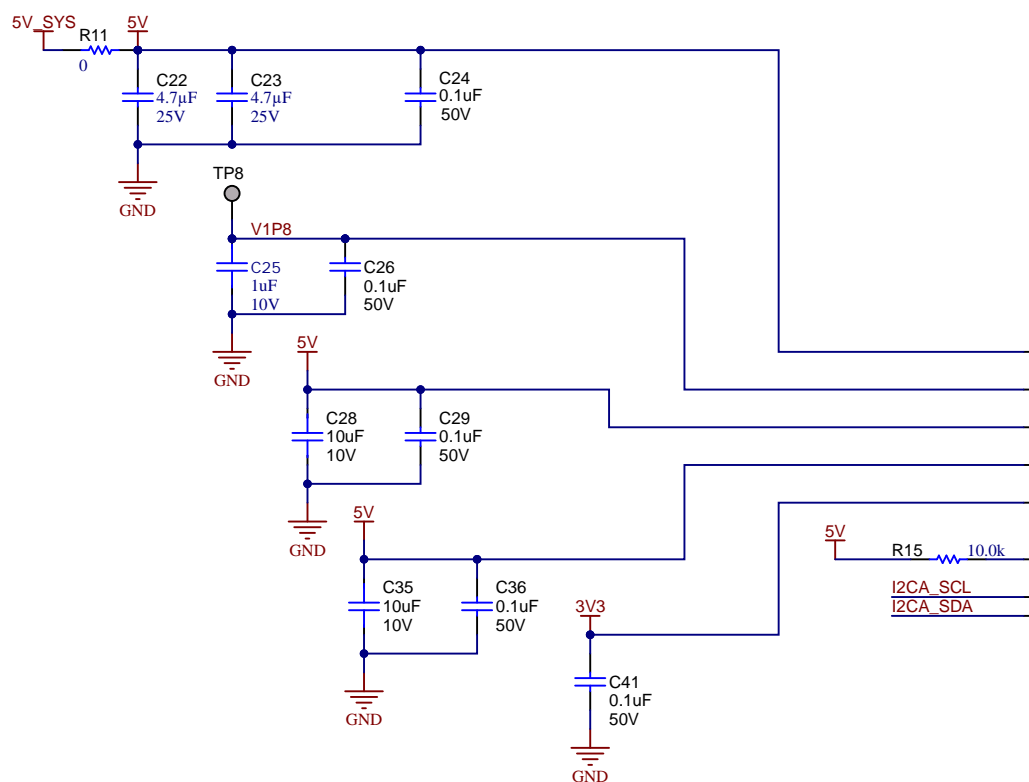
# POWER



# Indicators



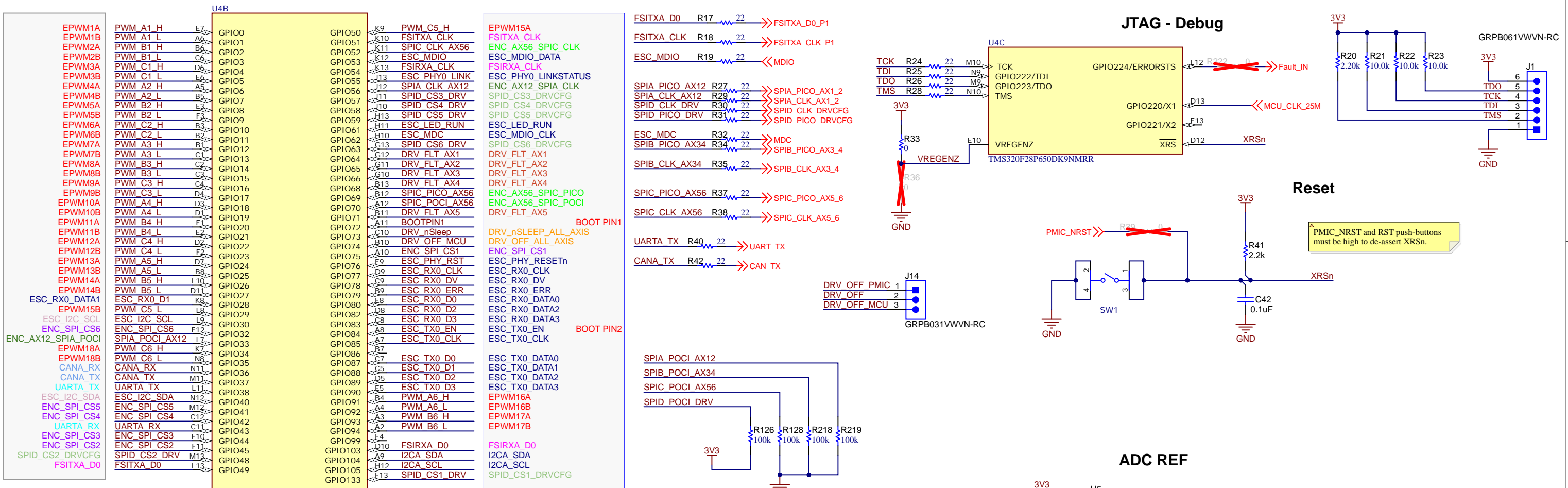
# SAFE PMIC



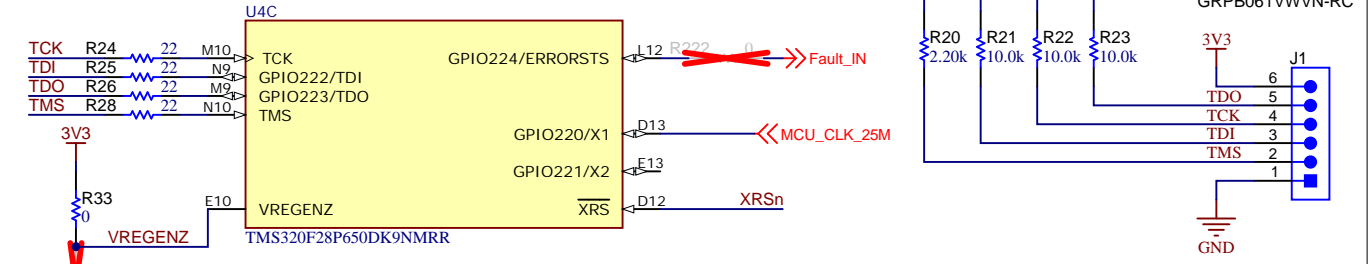
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Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 11/25/2025
TID #: TIDA-010992	Project Title: TIDA-010992	
Number: TIDA-010992	Rev: E1	Sheet Title:
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 2 of 13
Drawn By: Chen Gao	File: TIDA-010992_02_Power_SchDoc	Size: B
Engineer: Chen Gao	Contact: <a href="http://www.ti.com/support">http://www.ti.com/support</a>	

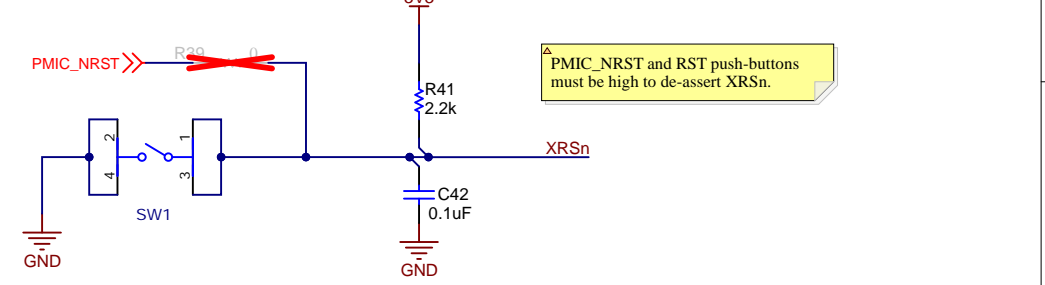




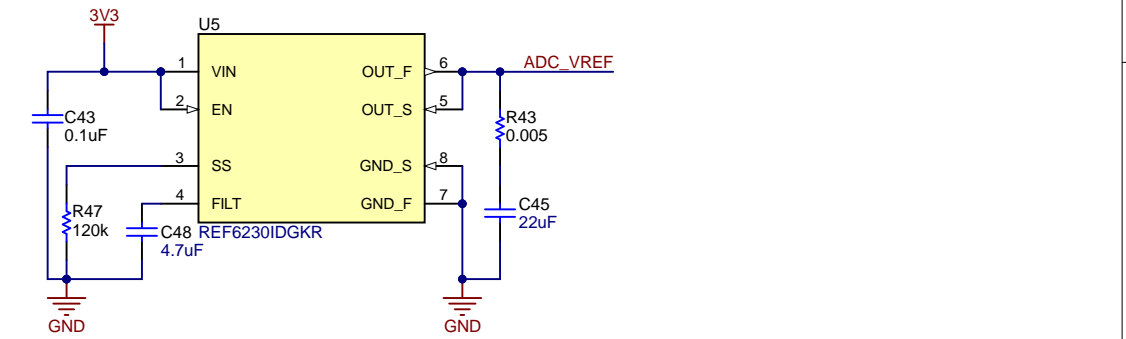
### JTAG - Debug



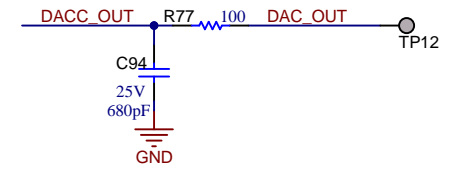
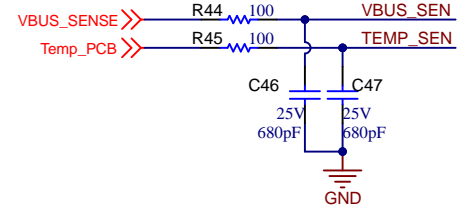
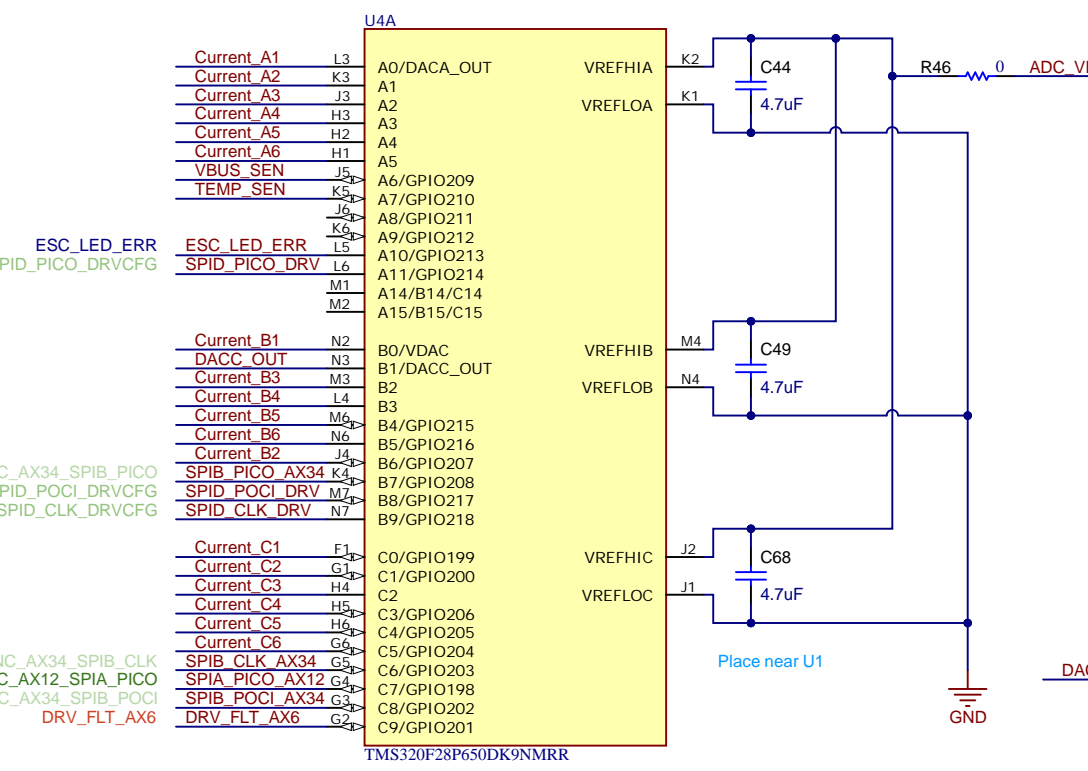
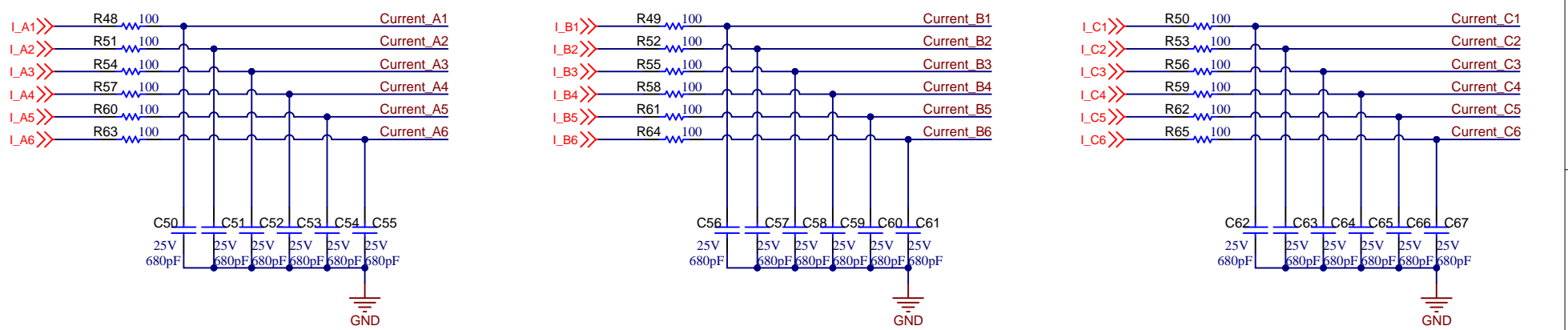
### Reset



### ADC REF



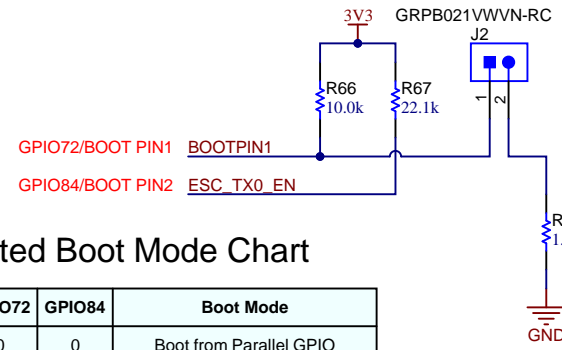
### ADC



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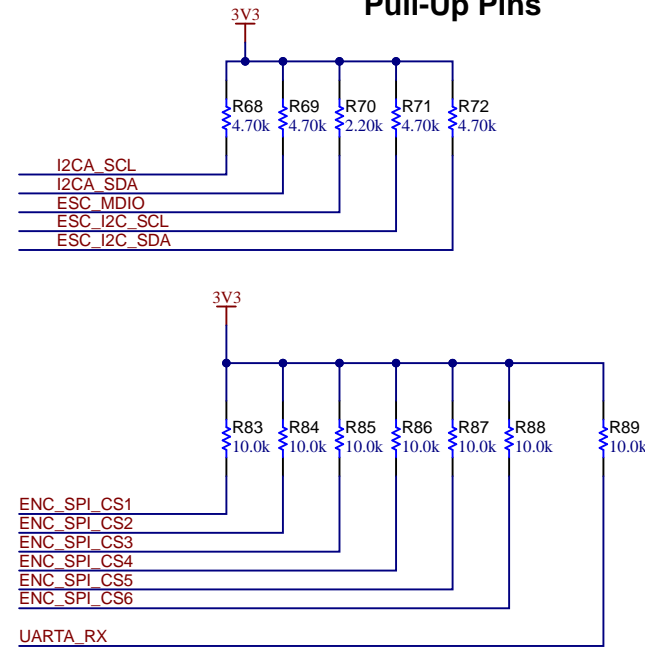
### Boot Mode Select



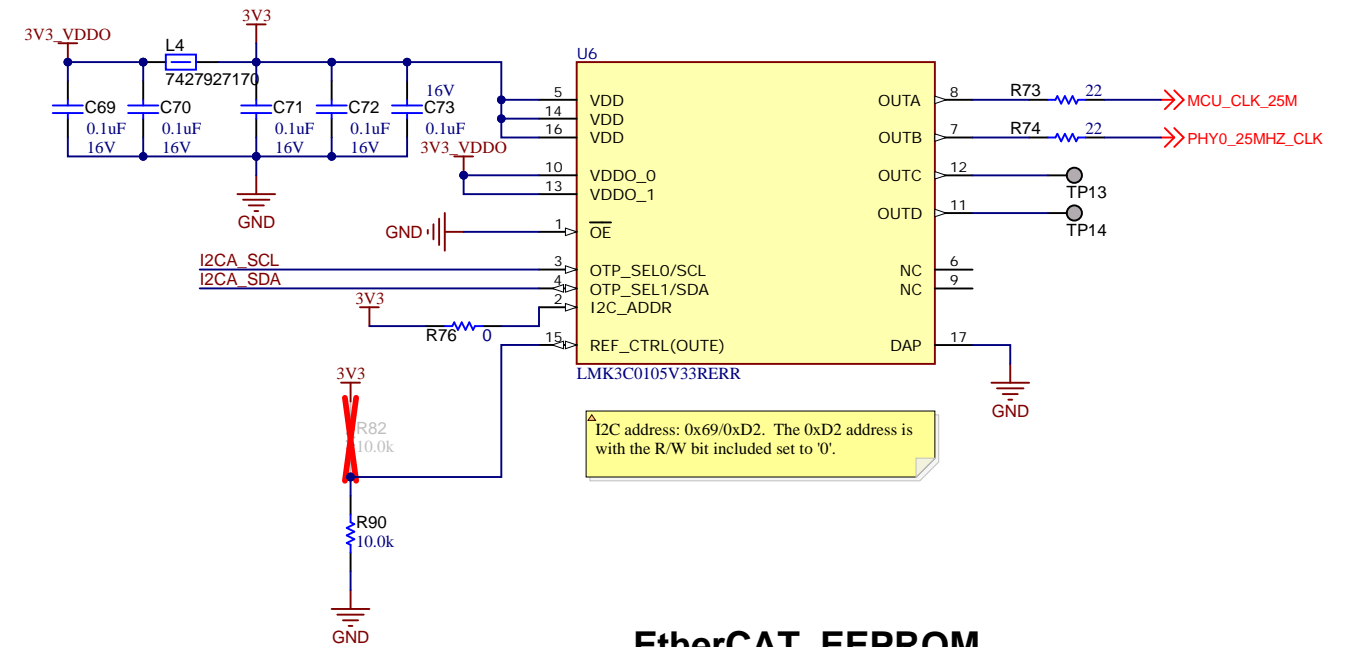
Selected Boot Mode Chart

Mode #	GPIO72	GPIO84	Boot Mode
00	0	0	Boot from Parallel GPIO
01	0	1	Boot from SCI / Wait Mode
02	1	0	Boot from CAN
03	1	1	Boot from Flash

### Pull-Up Pins

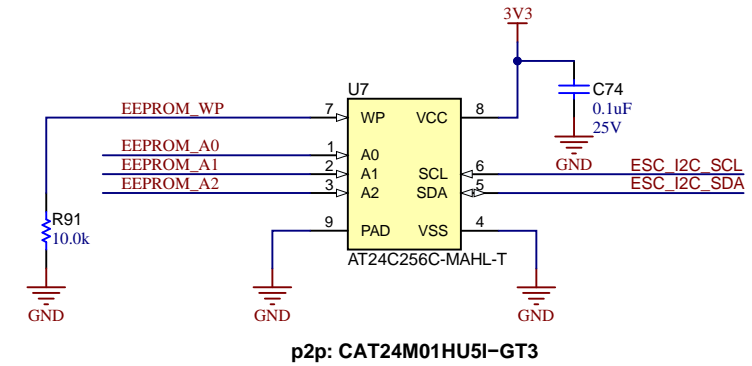


### 25 MHz BAW Oscillator with Clock Buffer



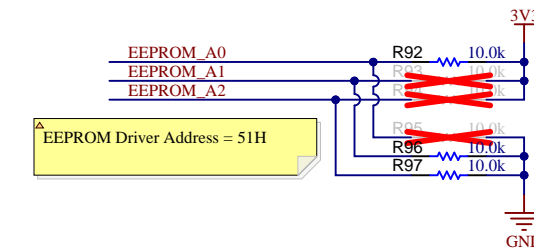
I2C address: 0x69/0xD2. The 0xD2 address is with the R/W bit included set to '0'.

### EtherCAT\_EEPROM



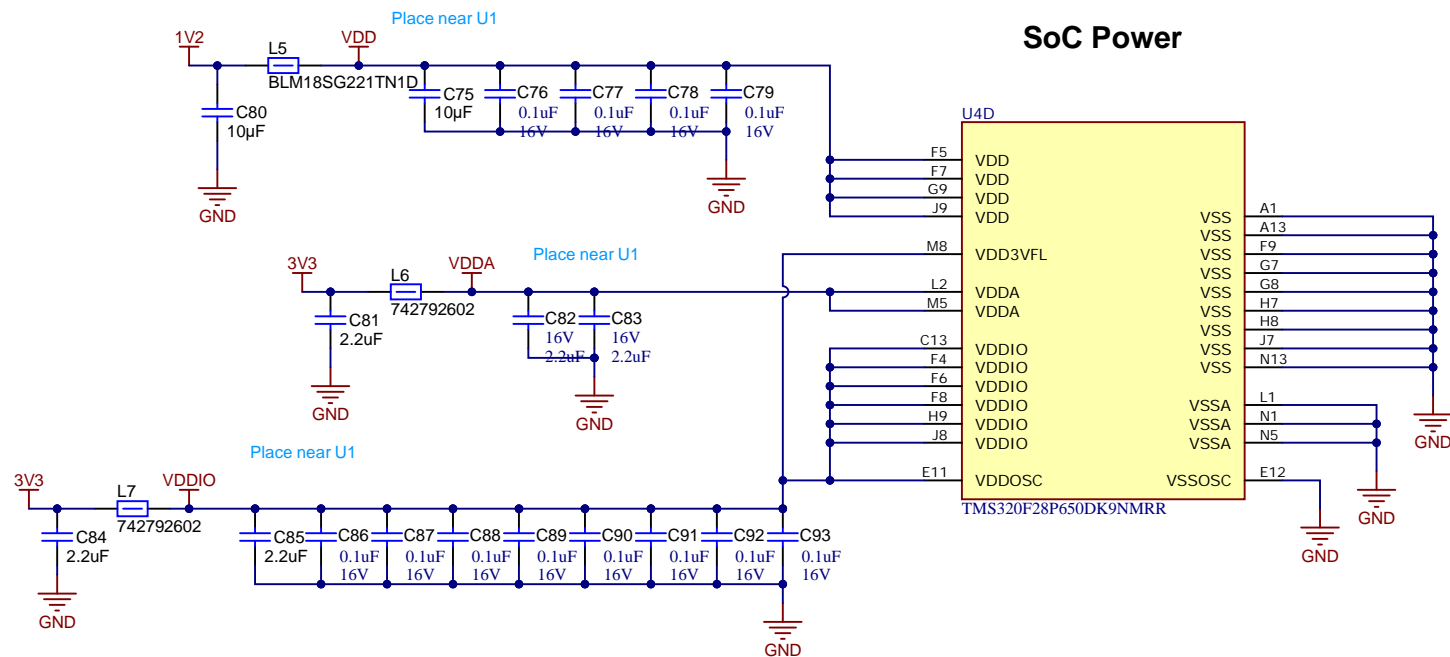
p2p: CAT24M01HU5I-GT3

### EEPROM Address

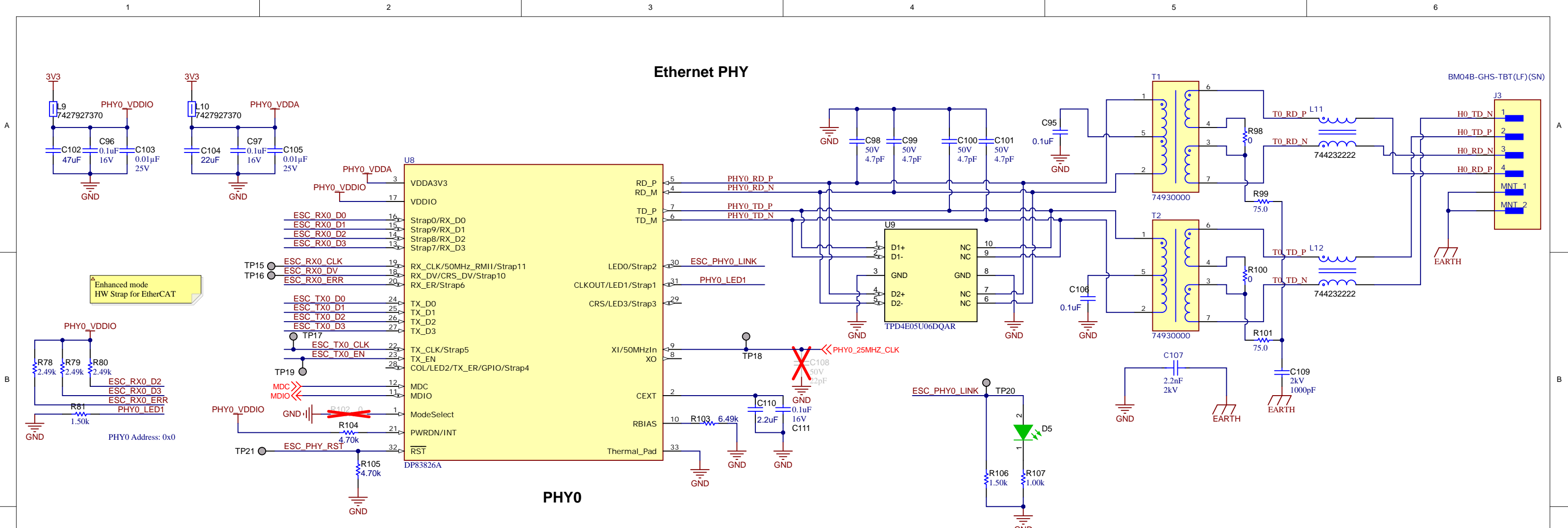


EEPROM Driver Address = 51H

### SoC Power

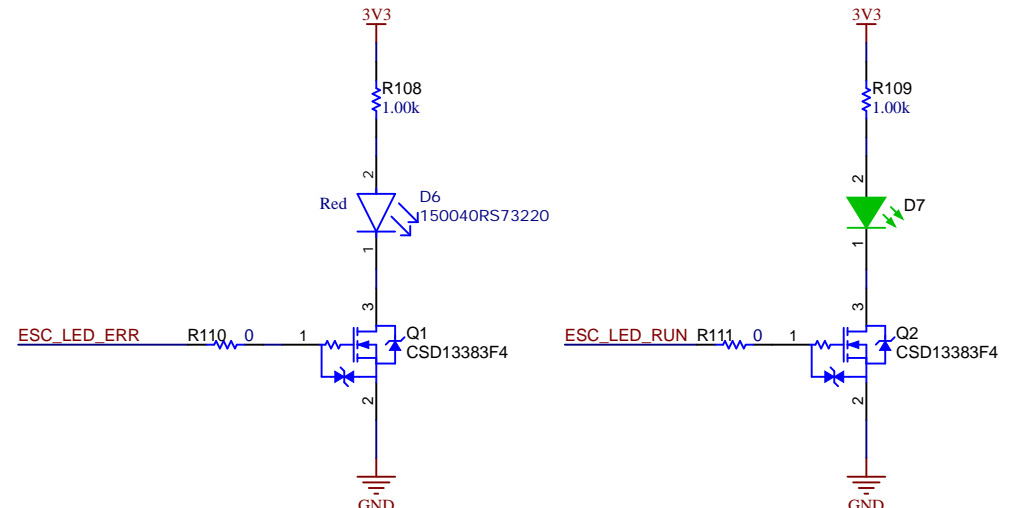


# Ethernet PHY



## PHY0

### Run and Error LEDs

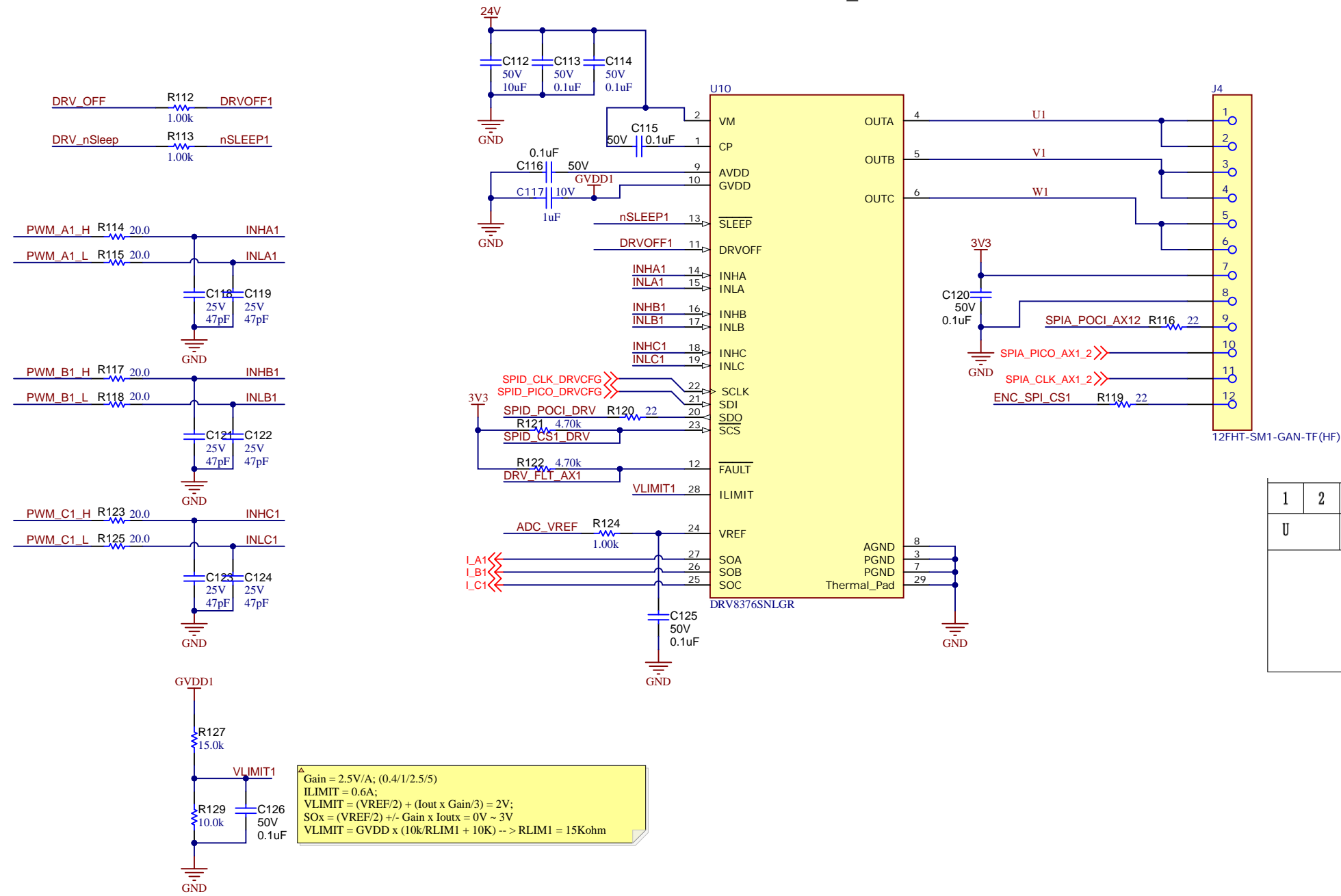


Orderable: <a href="#">ChangeMe in variant</a>	Designed for: <a href="#">Public Release</a>	Mod. Date: 9/14/2025
TID #: TIDA-010992	Project Title: TIDA-010992	
Number: TIDA-010992   Rev: E1	Sheet Title:	
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 5 of 13
Drawn By: Chen Gao	File: TIDA-010992_05_ETH_Conn.SchDoc	Size: B
Engineer: Chen Gao	Contact: <a href="http://www.ti.com/support">http://www.ti.com/support</a>	

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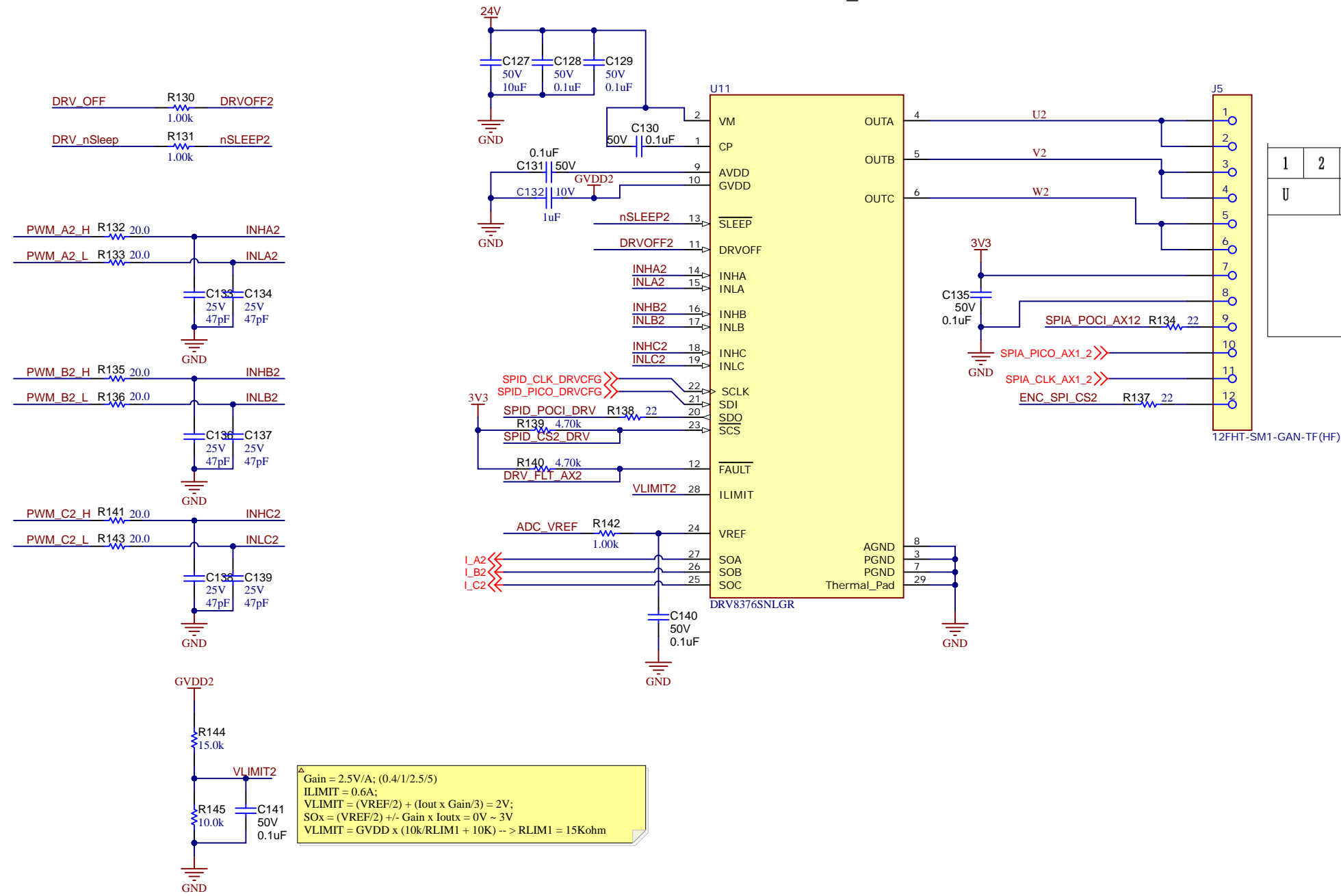
# AXIS1\_DRV



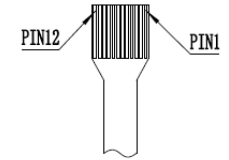
<sup>a</sup> Gain = 2.5V/A; (0.4/1/2.5/5)  
 ILIMIT = 0.6A;  
 VLIMIT = (VREF/2) + (Iout x Gain/3) = 2V;  
 SOx = (VREF/2) +/- Gain x Ioutx = 0V ~ 3V  
 VLIMIT = GVDD x (10k/RLIM1 + 10K) --> RLIM1 = 15Kohm

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# AXIS2\_DRV

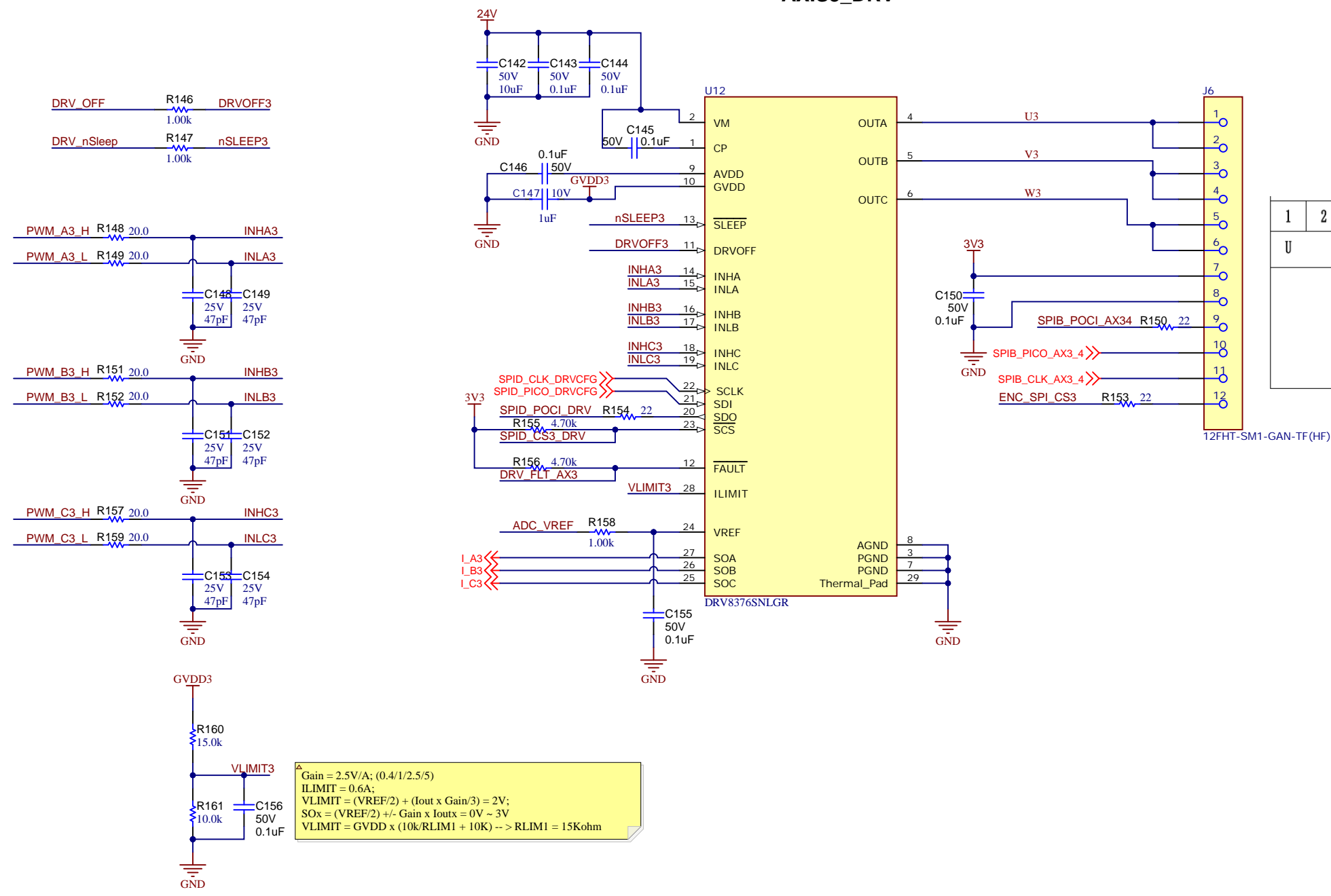


1	2	3	4	3	4	7	8	9	10	11	12
U	V	W	3.3V	GND	SPI MISO	SPI MOSI	SPI SCK	SPI NSS			

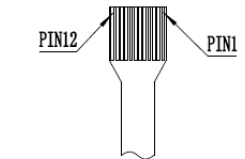


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# AXIS3\_DRV



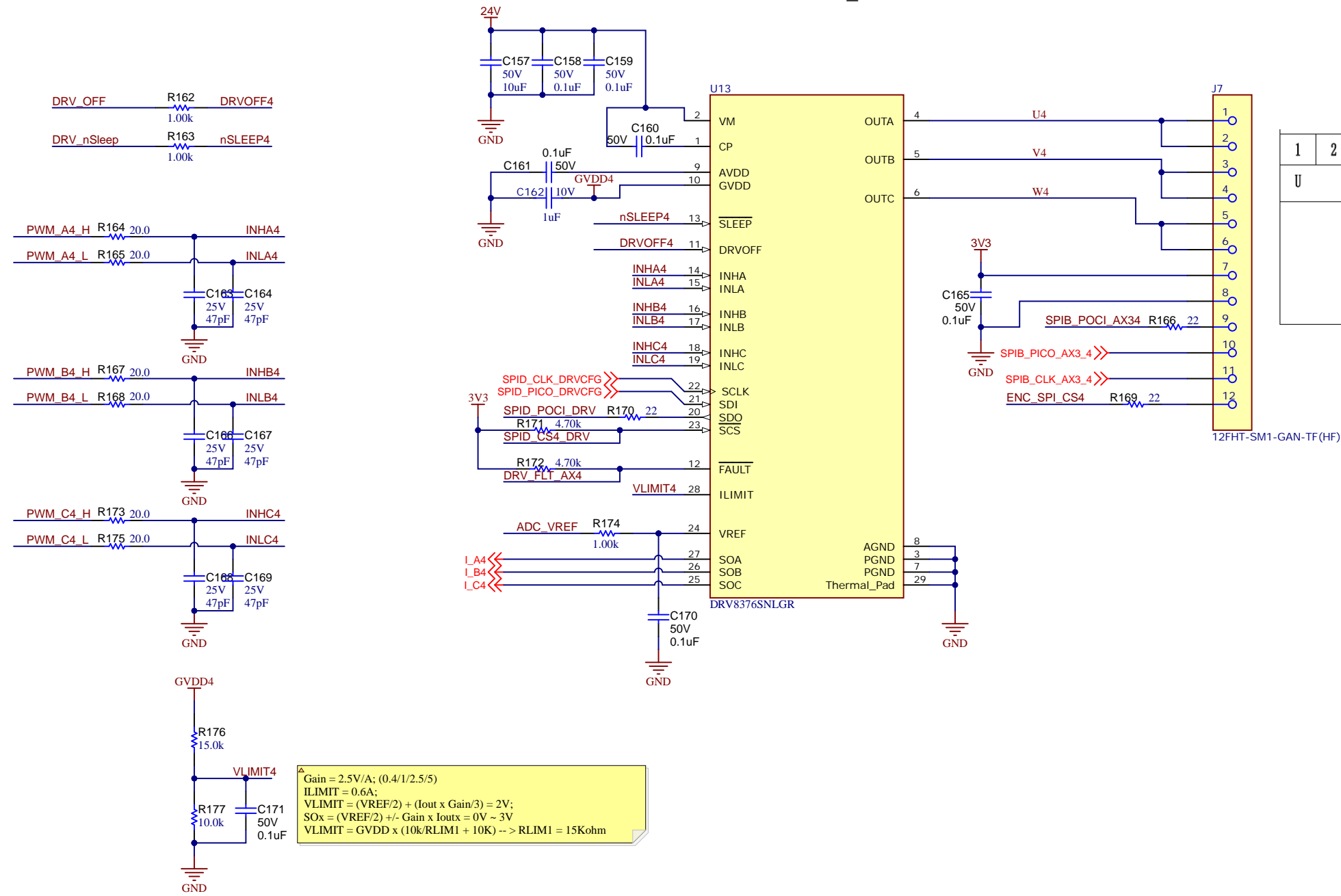
1	2	3	4	3	4	7	8	9	10	11	12
U		V		W		3.3V	GND	SPI MISO	SPI MOSI	SPI SCK	SPI NSS



<sup>a</sup> Gain = 2.5V/A; (0.4/1/2.5/5)  
 ILIMIT = 0.6A;  
 VLIMIT = (VREF/2) + (Iout x Gain/3) = 2V;  
 SOx = (VREF/2) +/- Gain x Ioutx = 0V ~ 3V  
 VLIMIT = GVDD x (10k/RLIM1 + 10K) --> RLIM1 = 15Kohm

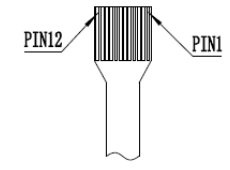


# AXIS4\_DRV

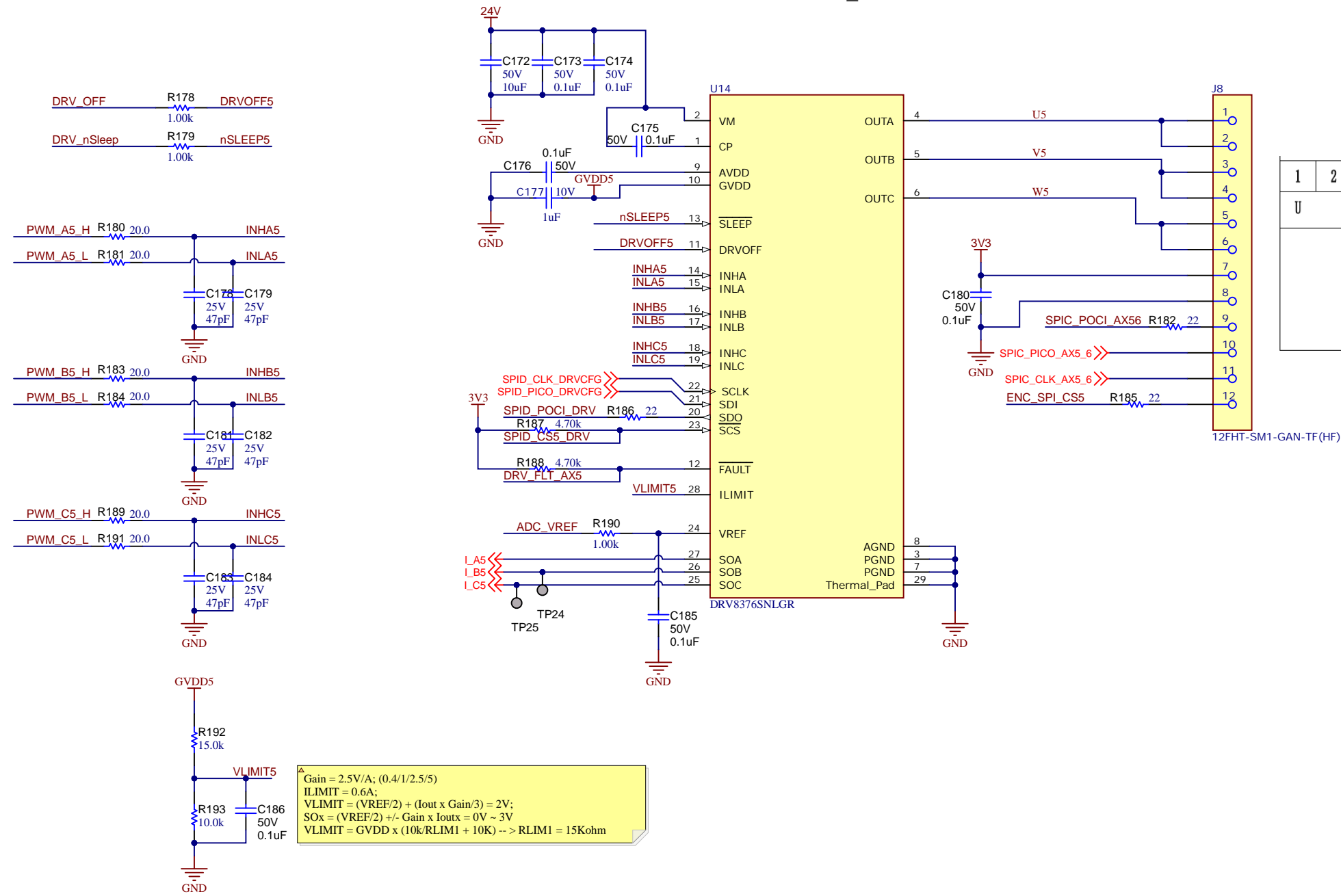


Gain = 2.5V/A; (0.4/1/2.5/5)  
 ILIMIT = 0.6A;  
 VLIMIT = (VREF/2) + (Iout x Gain/3) = 2V;  
 SOx = (VREF/2) +/- Gain x Ioutx = 0V ~ 3V  
 VLIMIT = GVDD x (10k/RLIM1 + 10K) --> RLIM1 = 15Kohm

1	2	3	4	3	4	7	8	9	10	11	12
U	V	W	3.3V	GND	SPI MISO	SPI MOSI	SPI SCK	SPI NSS			

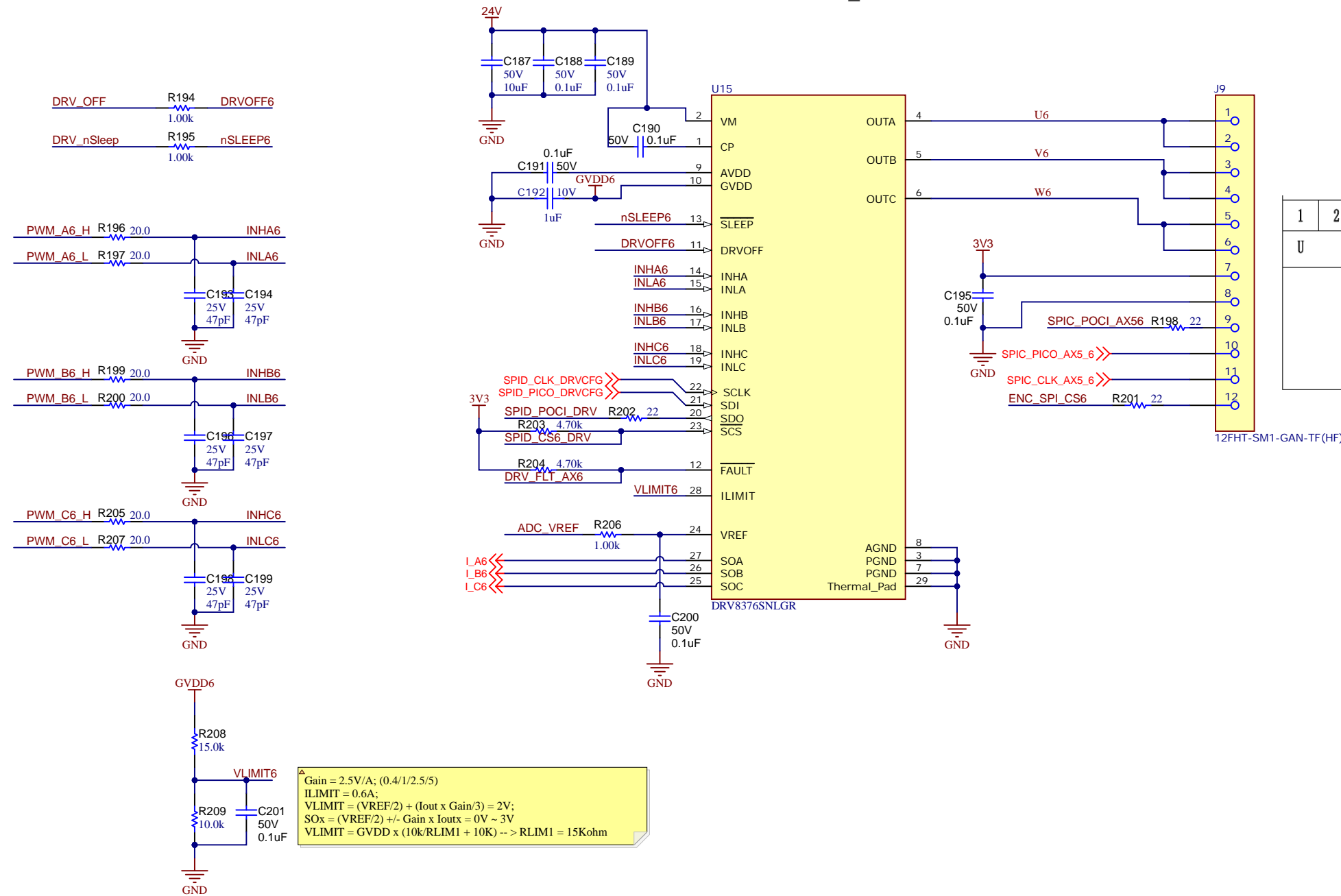


# AXIS5\_DRV

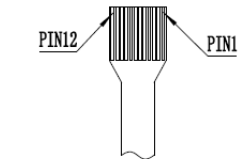


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# AXIS6\_DRV



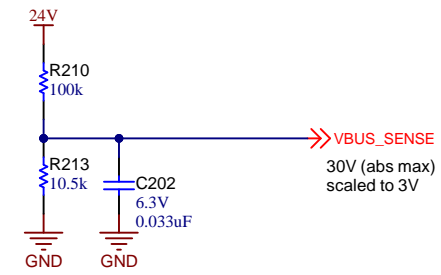
1	2	3	4	3	4	7	8	9	10	11	12
U		V		W		3.3V	GND	SPI MISO	SPI MOSI	SPI SCK	SPI NSS



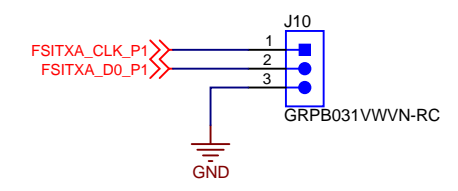
12FHT-SM1-GAN-TF(HF)

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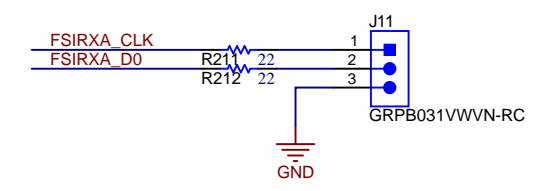
### DC BUS Sensing



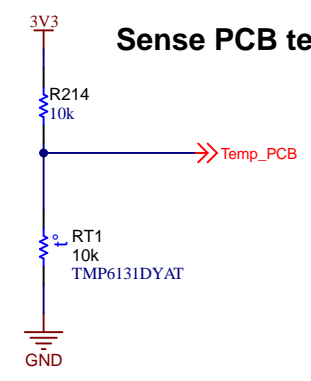
### FSI\_TXA\_PORT1



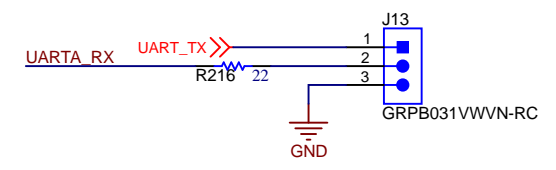
### FSI\_RXD\_PORT2



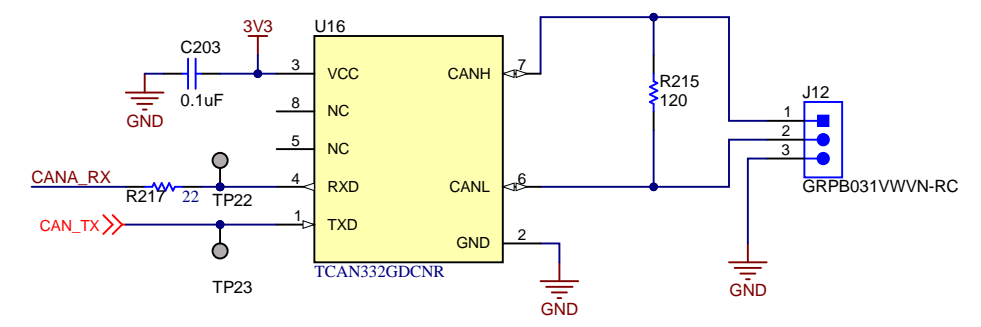
### Sense PCB temperature



### UART



### CAN Transceiver & Connector



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TID #: <a href="#">TIDA-010992</a>	Project Title: <a href="#">TIDA-010992</a>		
Number: <a href="#">TIDA-010992</a>   Rev: <a href="#">E1</a>	Sheet Title:		
SVN Rev: <a href="#">Not in version control</a>	Assembly Variant: <a href="#">001</a>	Sheet: <a href="#">12 of 13</a>	
Drawn By: <a href="#">Chen Gao</a>	File: <a href="#">TIDA-010992_12_Connectors.SchDoc</a>	Size: <a href="#">B</a>	
Engineer: <a href="#">Chen Gao</a>	Contact: <a href="http://www.ti.com/support">http://www.ti.com/support</a>		



PCB Number: TIDA-010992  
PCB Rev: E1

PCB LOGO  
Texas Instruments



PCB LOGO  
FCC disclaimer

PCB LOGO  
WEEE logo

<sup>A</sup> You should delete the nylon screws/standoffs and/or the bumpons as needed for your design (or substitute other parts from Hardware.IntLib). Bumpons are cheaper, but provide less clearance.

Deleting anything else from this page may result in your EVM submission being rejected (until you add them back).

Update the Label Text in the Label Table as needed for each Assembly Variant.

You should delete this note too.



Variant/Label Table	
Variant	Label Text
001	ChangeMe!
002	ChangeMe!

LBL1  
PCB Label  
THT-14-423-10  
Size: 0.65" x 0.20 "

ZZ1  
Label Assembly Note  
This Assembly Note is for PCB labels only

ZZ2  
Assembly Note  
These assemblies are ESD sensitive, ESD precautions shall be observed.

ZZ3  
Assembly Note  
These assemblies must be clean and free from flux and all contaminants. Use of no clean flux is not acceptable.

ZZ4  
Assembly Note  
These assemblies must comply with workmanship standards IPC-A-610 Class 2, unless otherwise specified.

Orderable: <a href="#">ChangeMe in variant</a>	Designed for: <a href="#">Public Release</a>	Mod. Date: 9/18/2025
TID #: <a href="#">TIDA-010992</a>	Project Title: <a href="#">TIDA-010992</a>	
Number: <a href="#">TIDA-010992</a>   Rev: <a href="#">E1</a>	Sheet Title:	
SVN Rev: <a href="#">Not in version control</a>	Assembly Variant: <a href="#">001</a>	Sheet: <a href="#">13 of 13</a>
Drawn By: <a href="#">Chen Gao</a>	File: <a href="#">TIDA-010992_Hardware.SchDoc</a>	Size: B
Engineer: <a href="#">Chen Gao</a>	Contact: <a href="#">http://www.ti.com/support</a>	

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