



BARKOUR ROBOT CORTES CONTROLLER	
APPROVED	GOOGLE LLC
DWG NO	650-02977-05
RELEASED	2024/05/09
FILE	1-Top.SchDoc

1-Top.SchDoc

Google DeepMind

1600 AMPHITHEATRE PARKWAY
MOUNTAIN VIEW CA 94043

SIZE	A3	SHEET	1 OF 10
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Vdd should power up 0-10ms after Vdd_IO powers up

3V3

C4 10UF 10V

C2 0.1UF 10V

C3 0.1UF 10V

GND

U1
LSM9DS1TR

AGM_CLK 2 SCL/SPC

AGM_MOSI 4 SDA/SDI/SDO

AGM_CS_AG 7 CS_A/G

AGM_DATA_EN_AG 13 DEN_A/G

AGM_CS_M 8 CS_M

AGM_MISO 5 SDO_A/G

AGM_INT1_AG 11 INT1_A/G

AGM_INT2_AG 12 INT2_A/G

AGM_MISO 6 SDO_M

AGM_INT_M 10 INT_M

AGM_DRDY_M 9 DRDY_M

R2 10K

R3 10K

GND

GND

C1 24 CAP


C5 0.01UF 16V

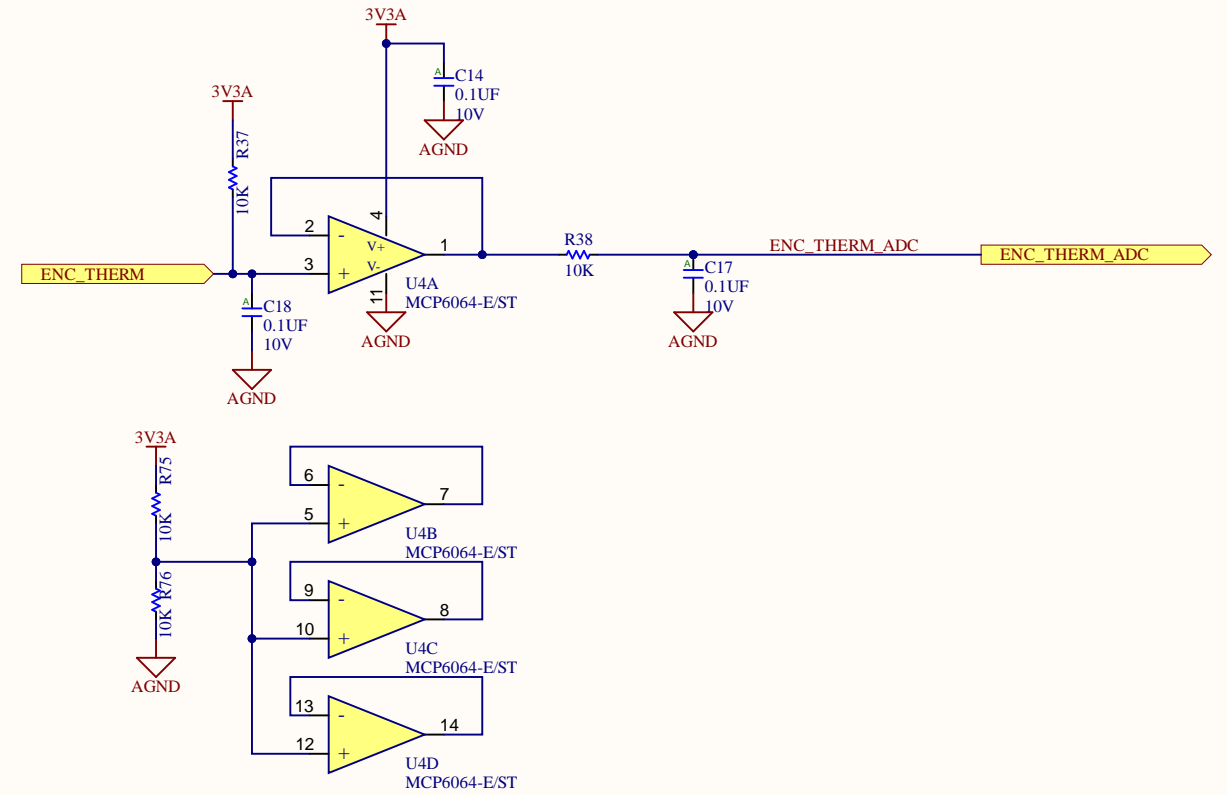
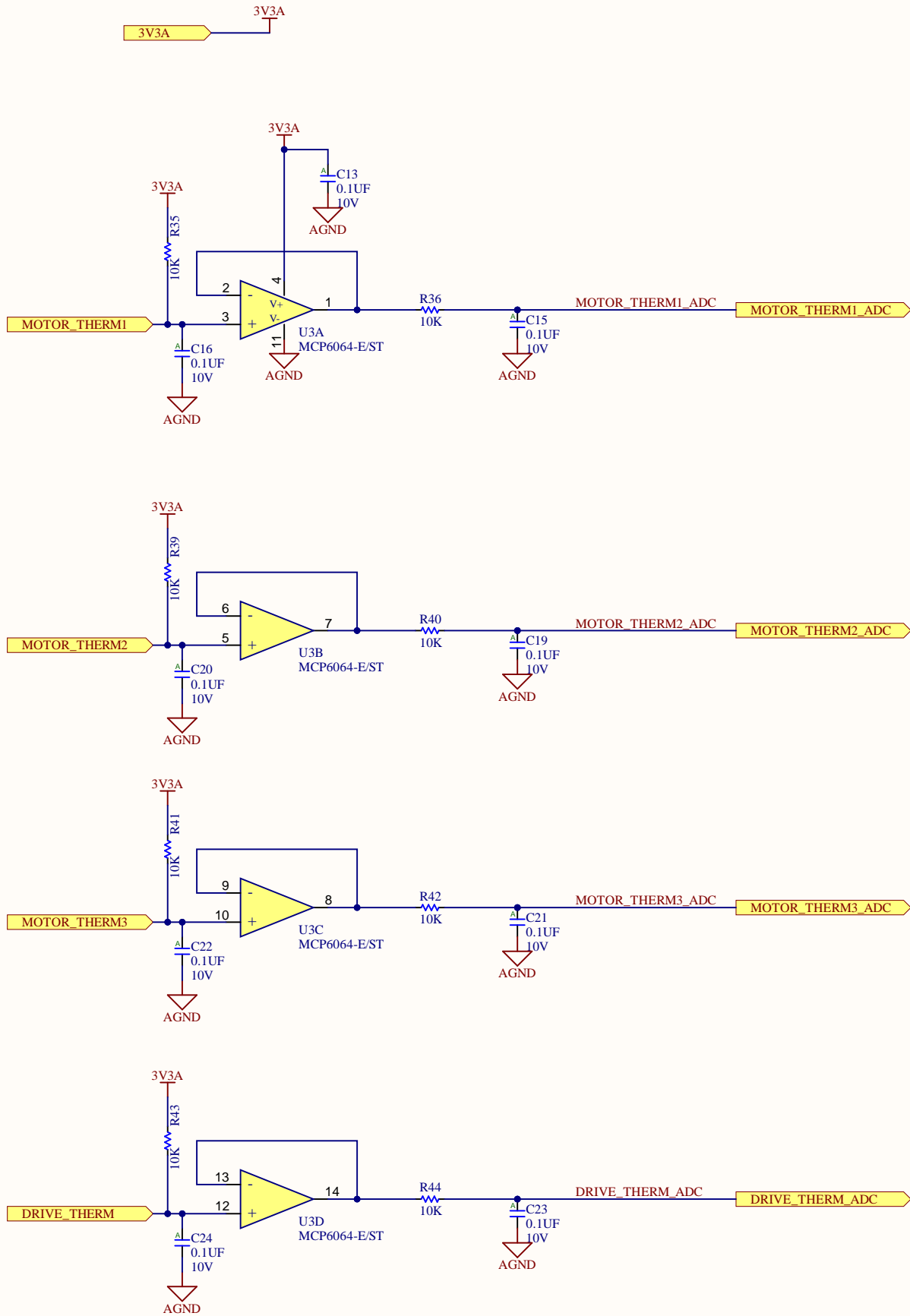
C6 0.1UF 10V


GND

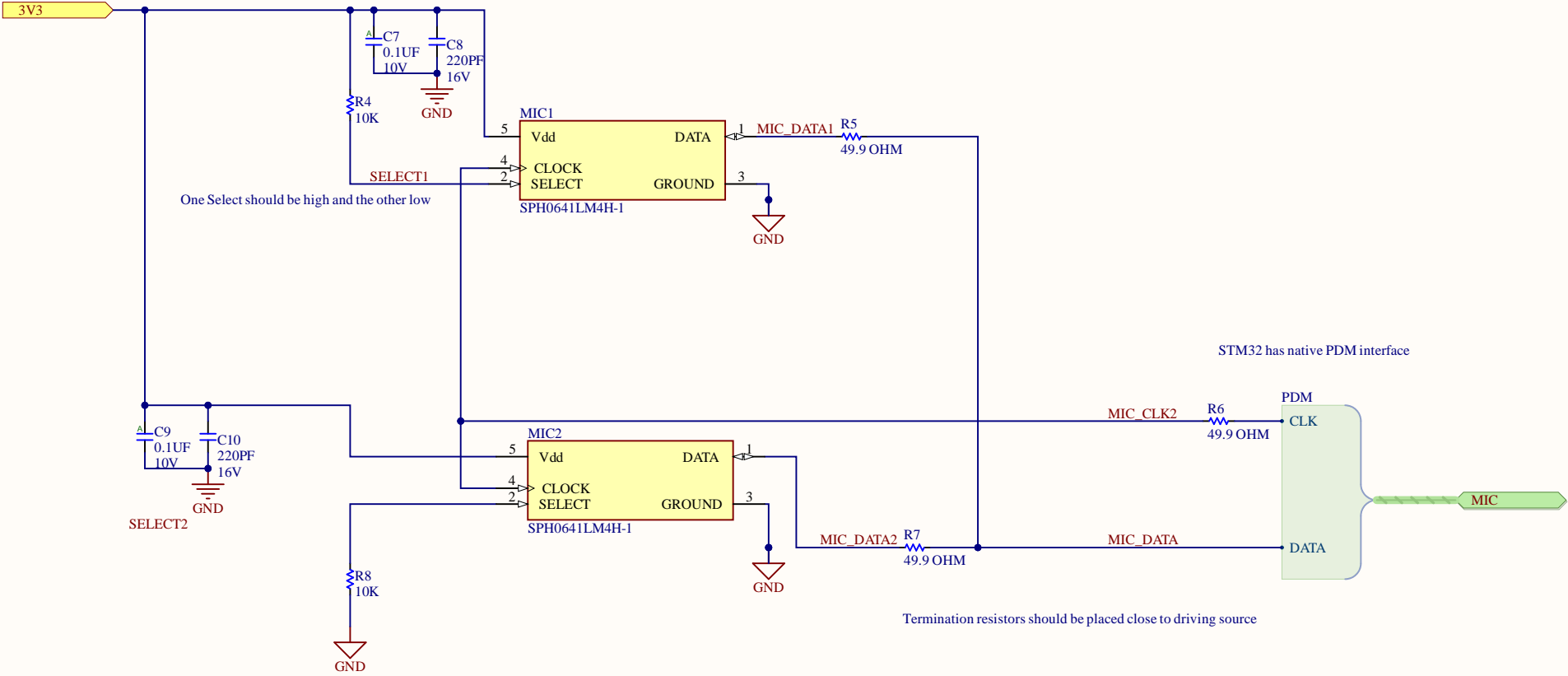
GND


Needs to be 16V ca

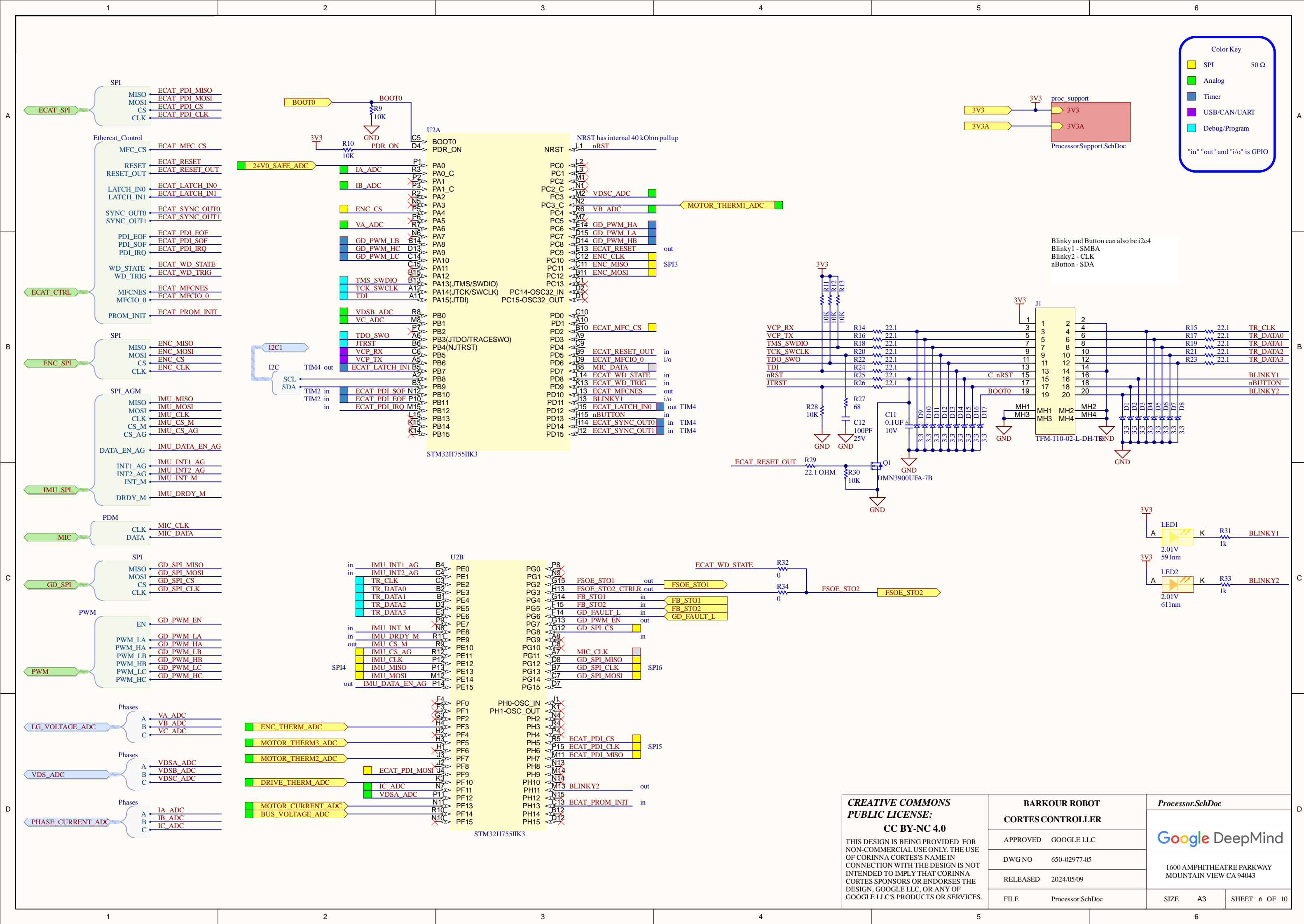
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	CORTES CONTROLLER		 <p>1600 AMPHITHEATRE PARKWAY MOUNTAIN VIEW CA 94043</p>	
	APPROVED	GOOGLE LLC		
	DWG NO	650-02977-05		
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FILE	Accelerometer.SchDoc	SIZE	A3	SHEET 2 OF 10

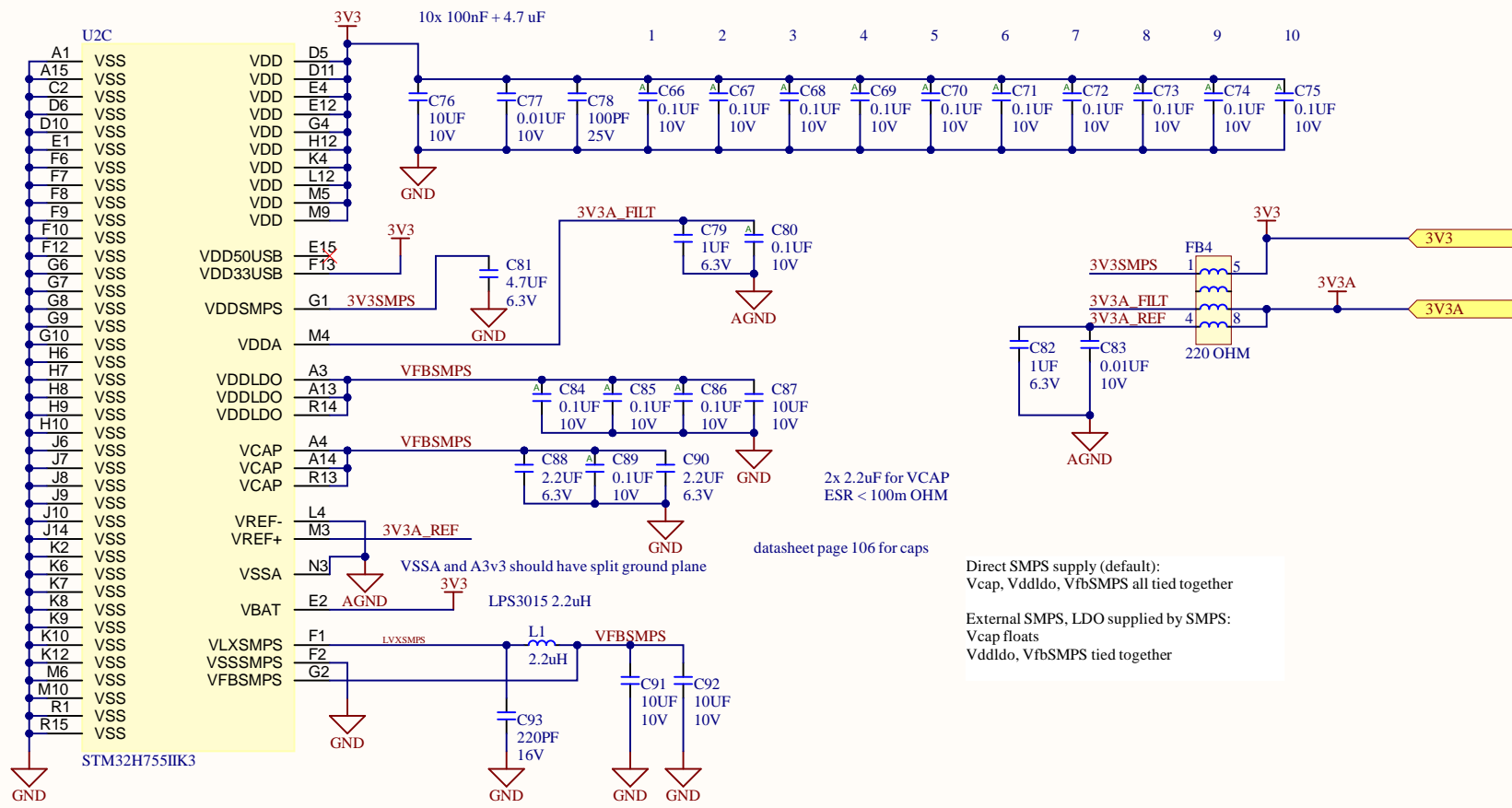


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	APPROVED	GOOGLE LLC	 1600 AMPHITHEATRE PARKWAY MOUNTAIN VIEW CA 94043	
	DWG NO	650-02977-05		
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	FILE	Temperature.SchDoc	SIZE	A3
			SHEET 3 OF 10	




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	DWG NO	650-02977-05			
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	FILE	Microphone.SchDoc	SIZE	A3	SHEET 5 OF 10

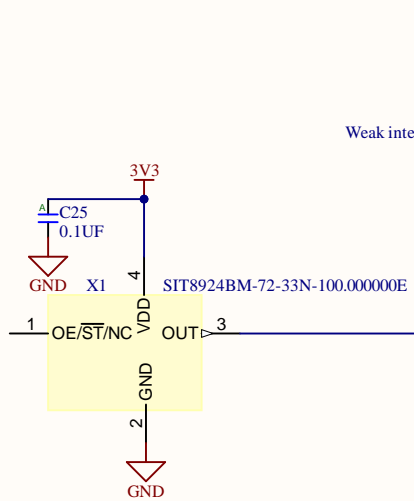




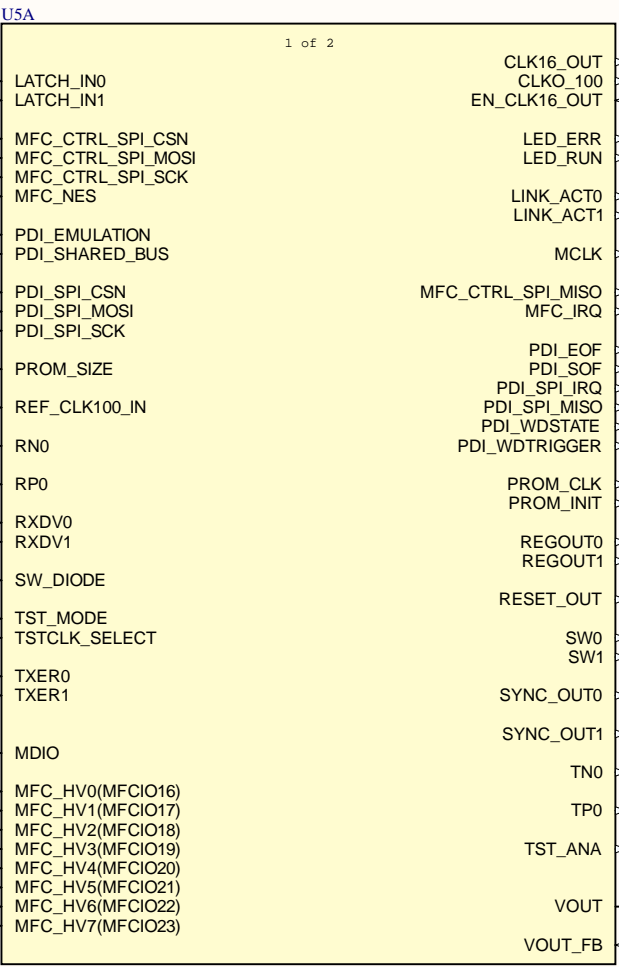
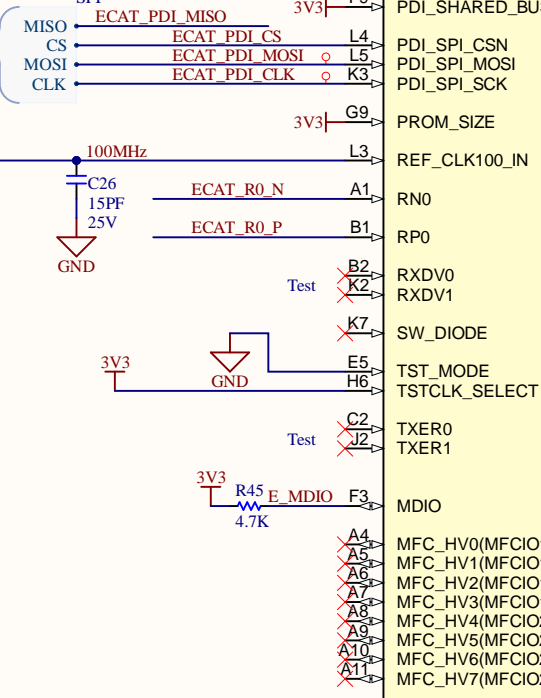
VDDLDO ties to 3v3 (LDO on) or Vcap (SMPS on - default)
1x 10u cap may be removed if using smps
Vcap ties to nothing (LDO on) or VfbSMPS (SMPS on - default)
datasheet page 106 for smps values incl. cap ESR

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	APPROVED	GOOGLE LLC	 1600 AMPHITHEATRE PARKWAY MOUNTAIN VIEW CA 94043	
	DWG NO	650-02977-05		
	RELEASED	2024/05/09		
	FILE	ProcessorSupport.SchDoc	SIZE	A3
				SHEET 7 OF 10

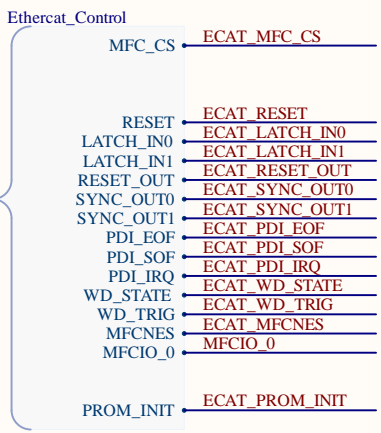
EtherCAT



ECAT_SPI



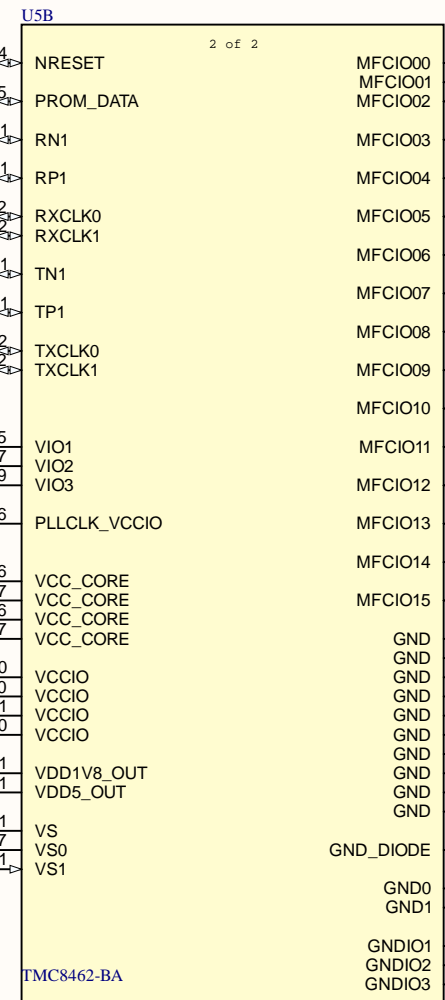
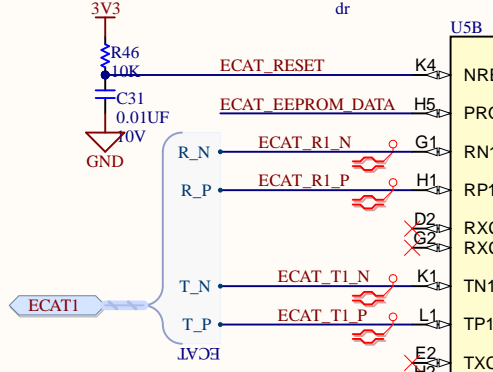
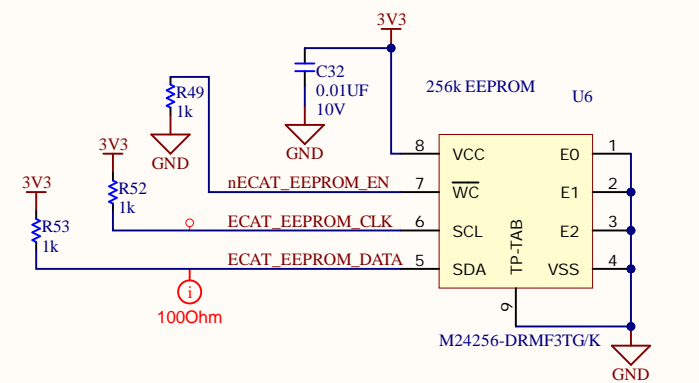
ECAT_CTRL



ECAT0

Port 0 = EtherCAT in, 1 = EtherCAT out

Writes are possible with ~WC is driven low or floating.

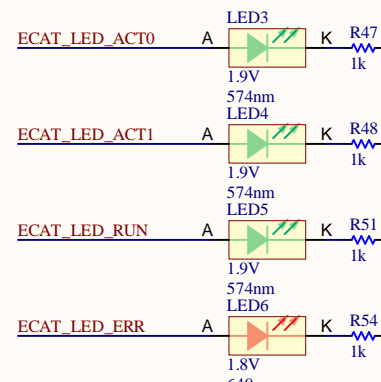


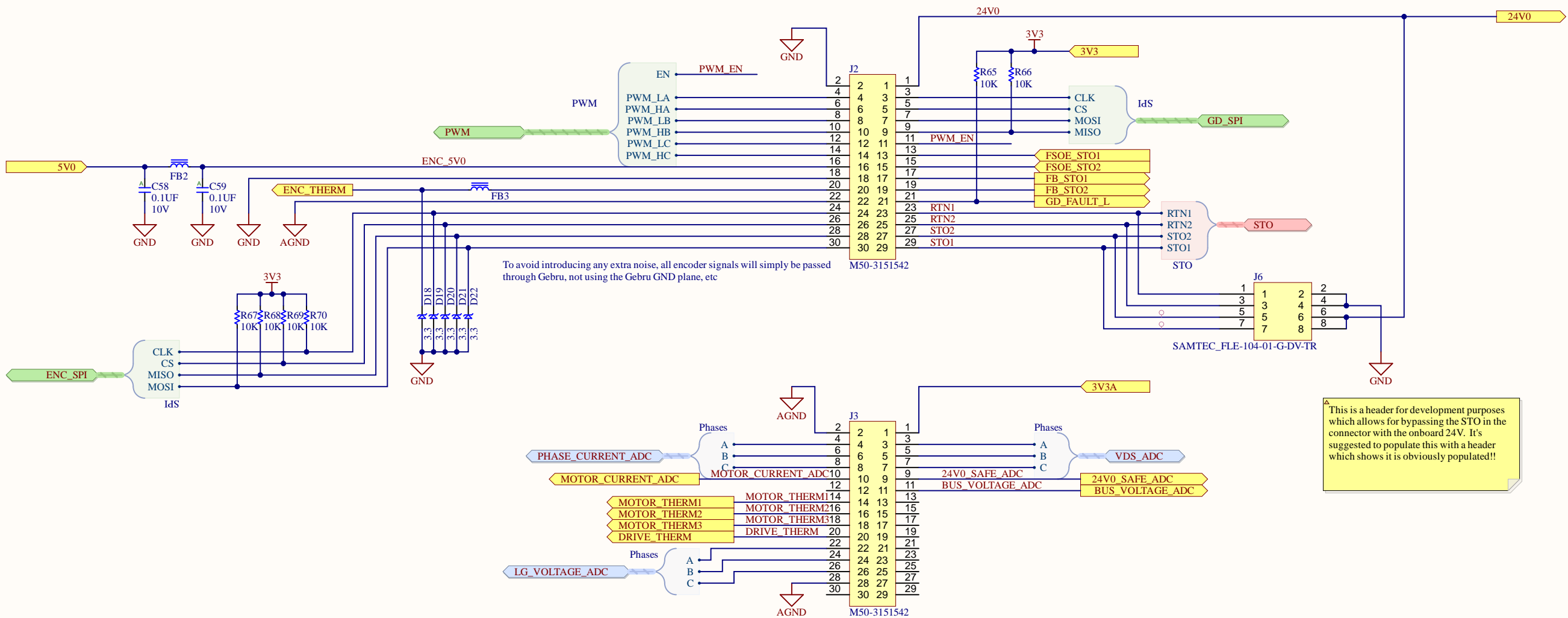
VDD5_OUT tied to 3v3 per datasheet pg 35


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SIZE	A3	SHEET 8 OF 10





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	FILE	MezzanineConnectors.SchDoc	SIZE	A3	SHEET 9 OF 10

