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B

C

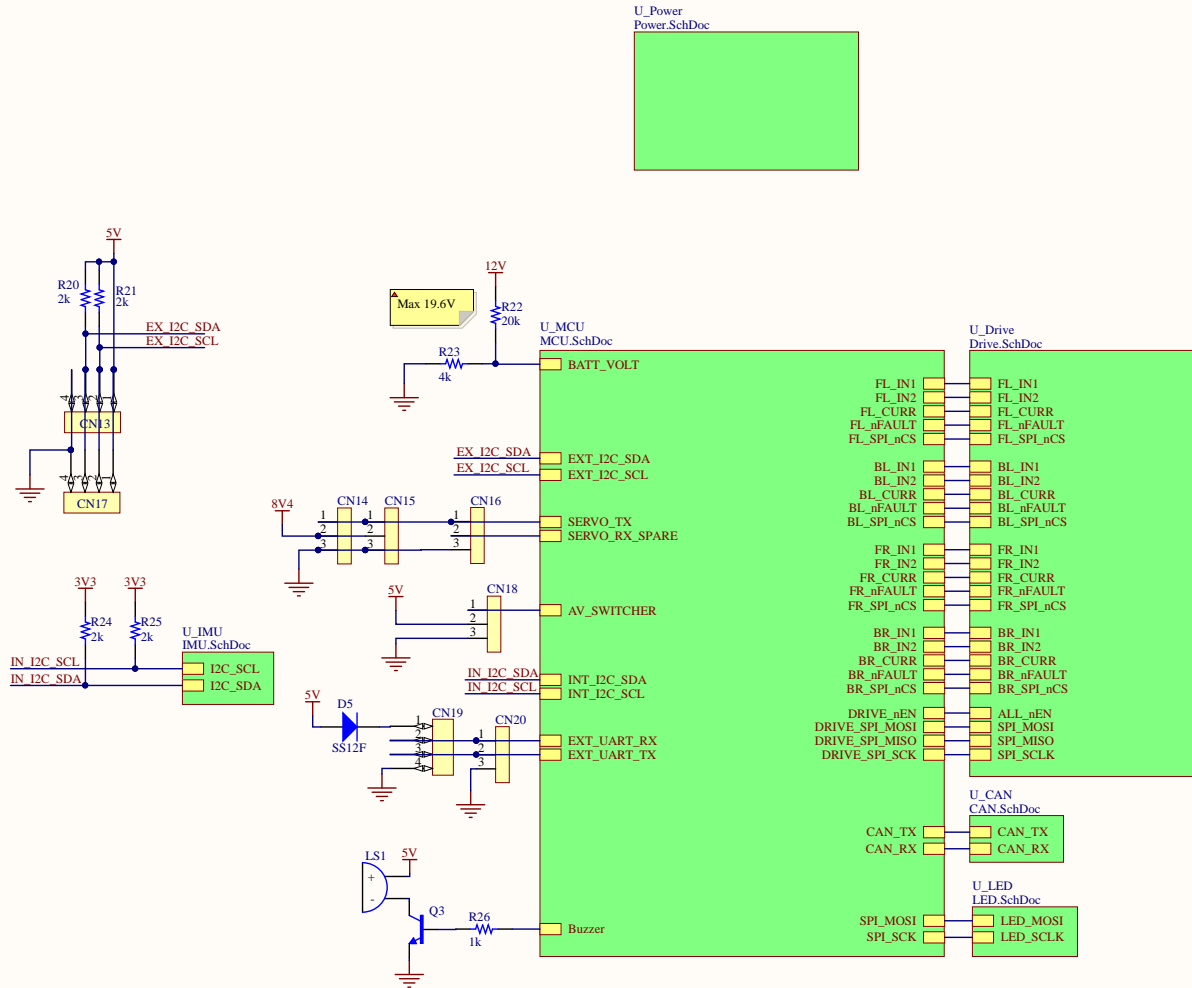
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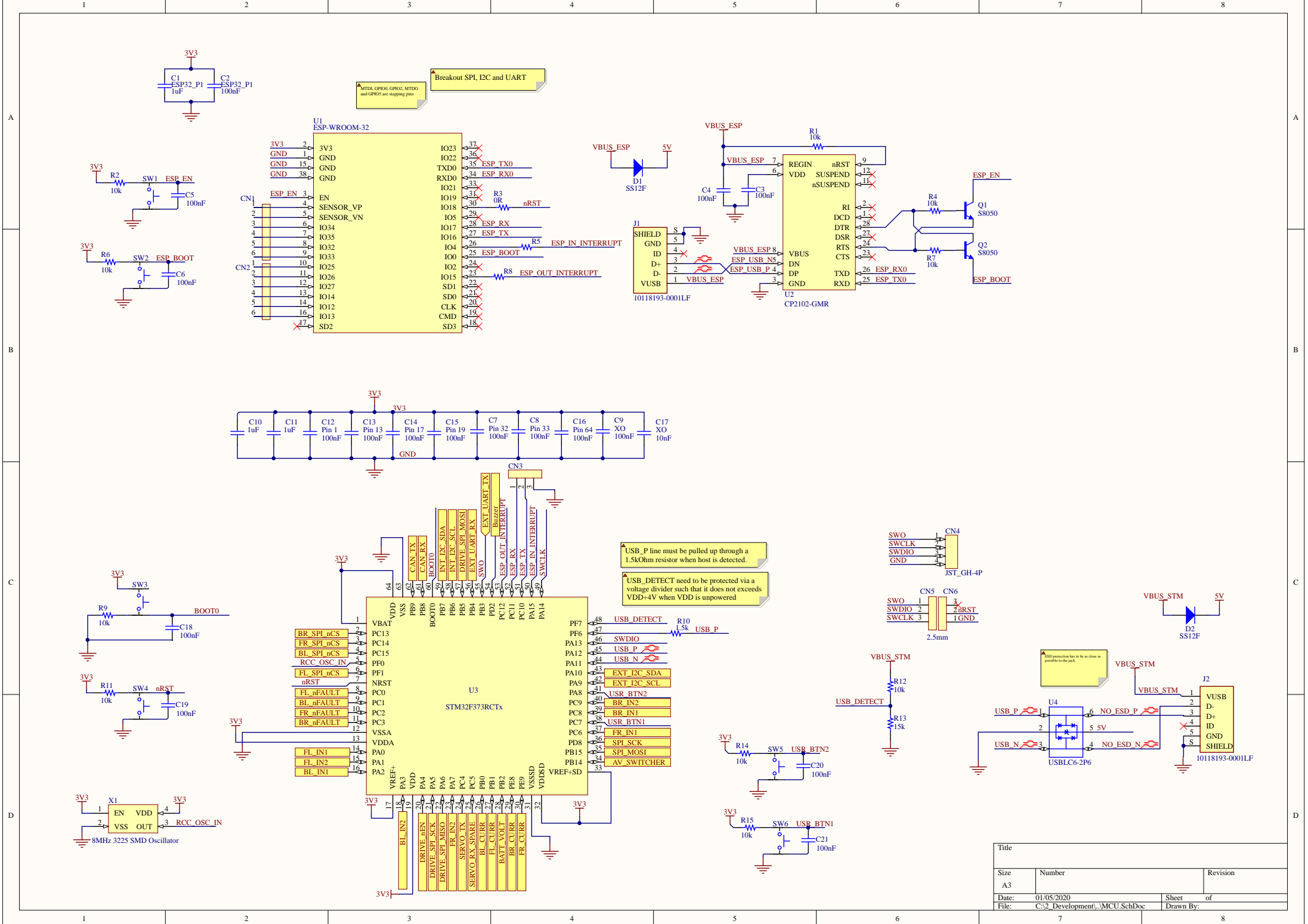
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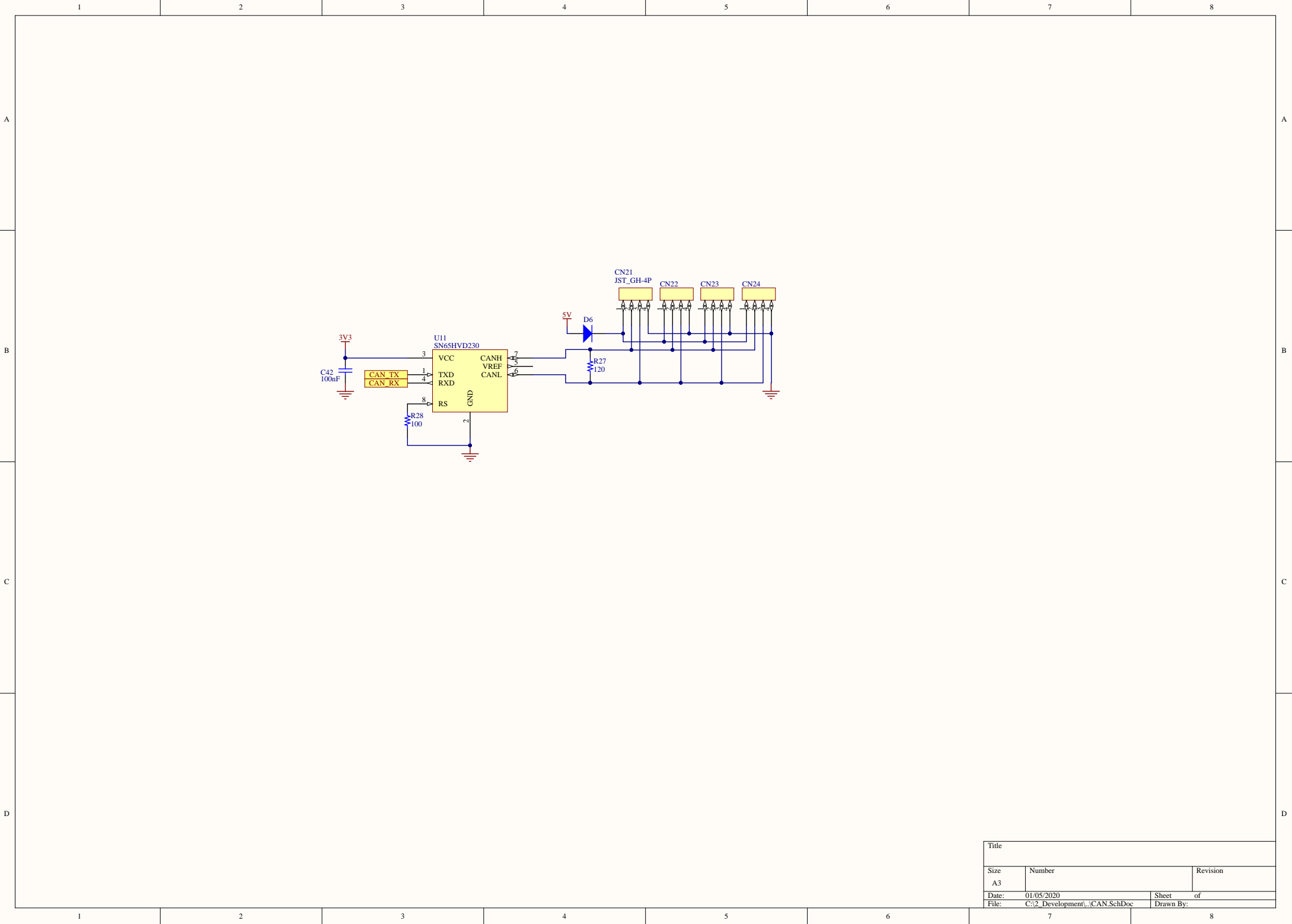
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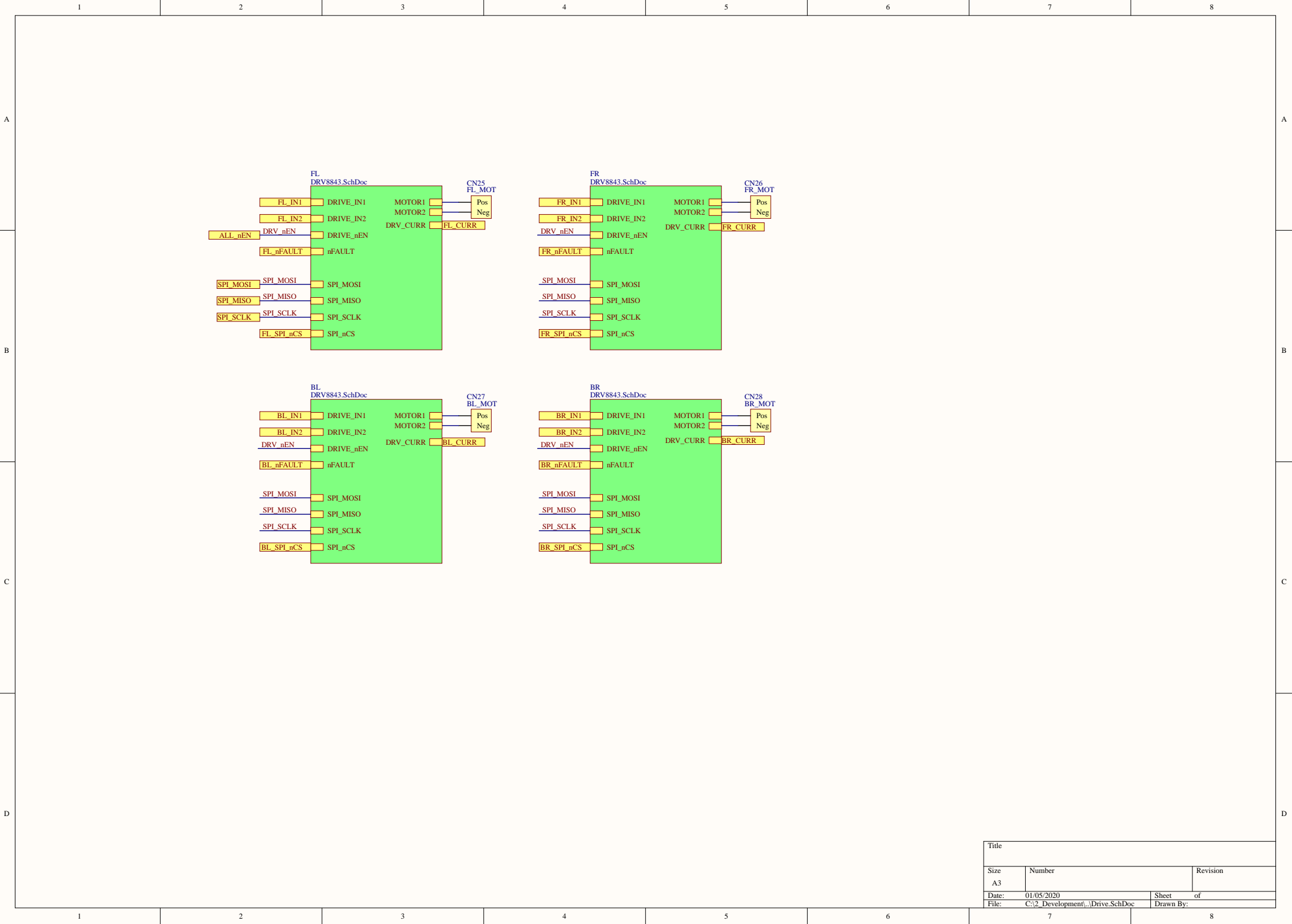
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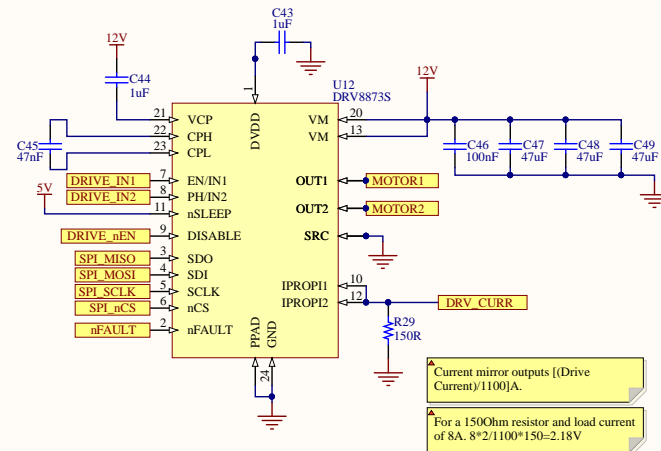
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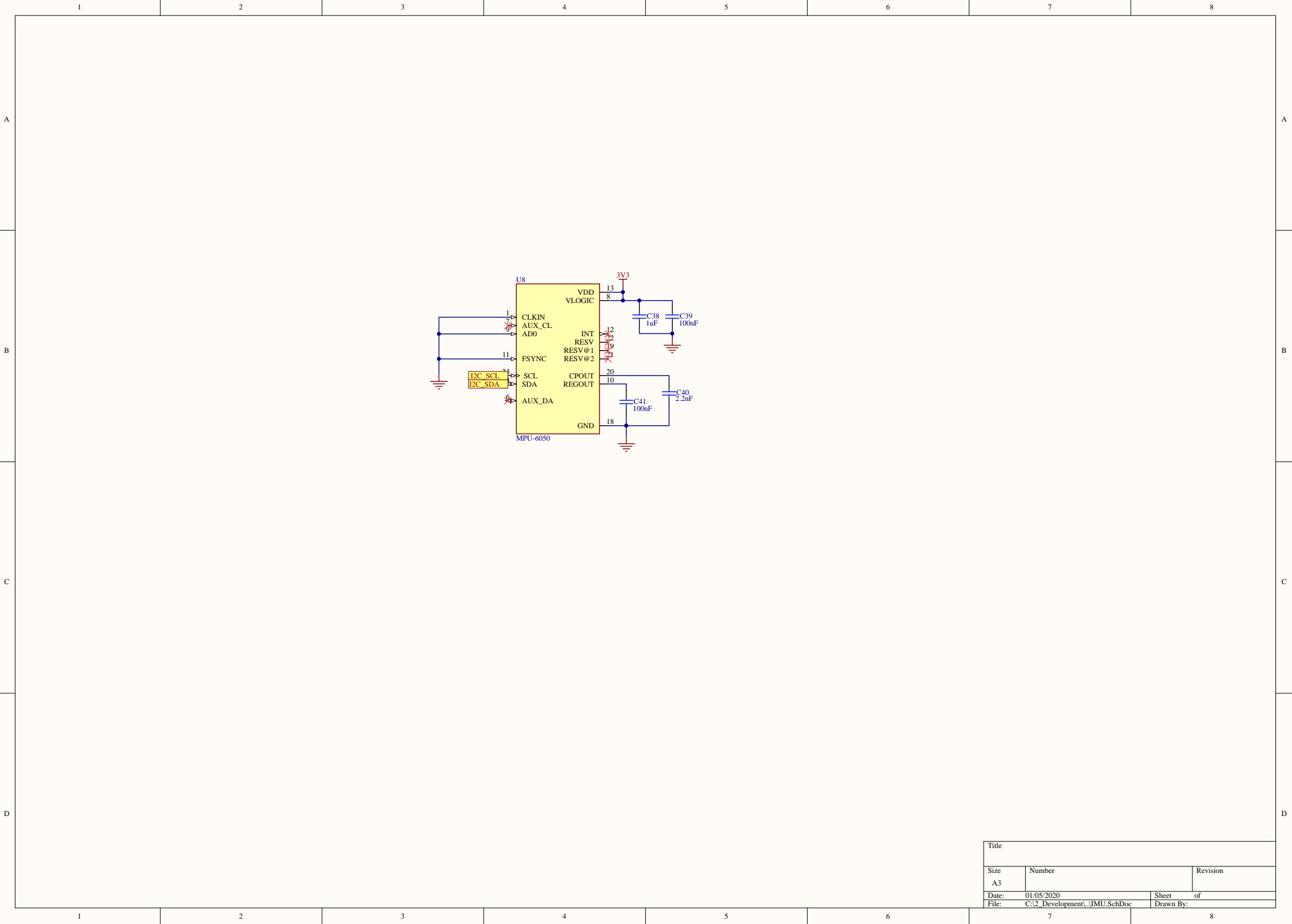
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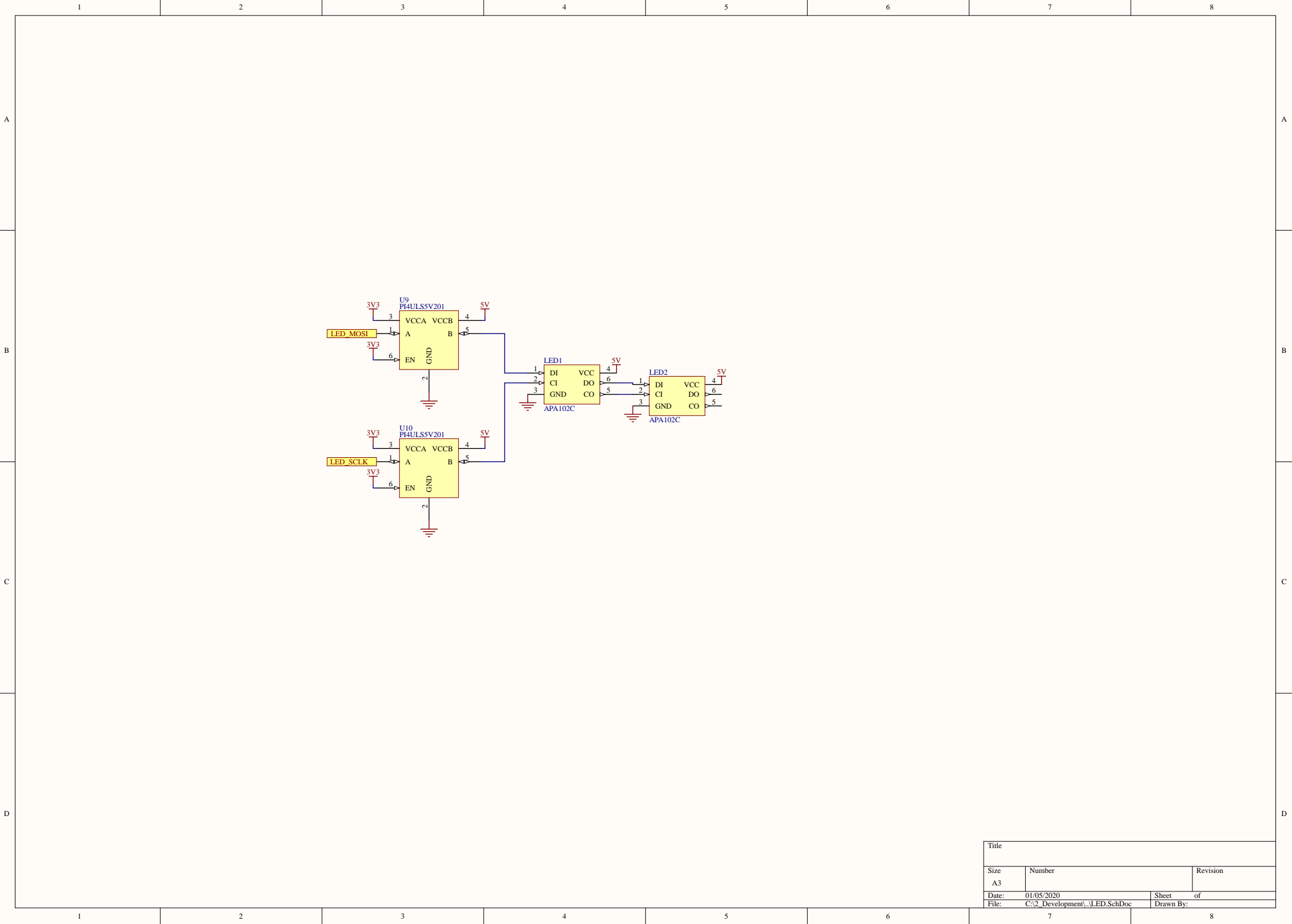
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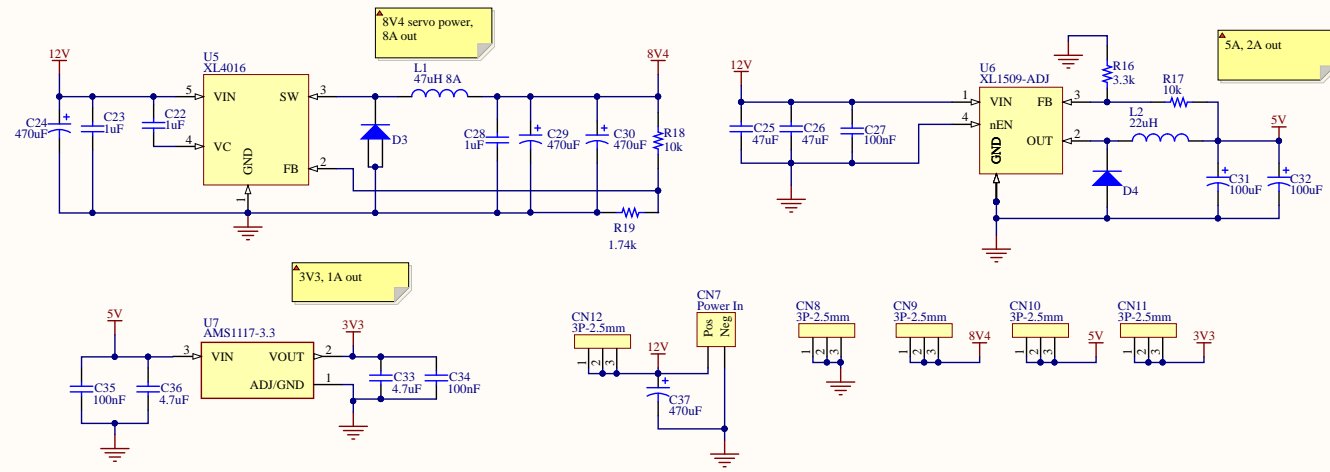


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Title		
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A

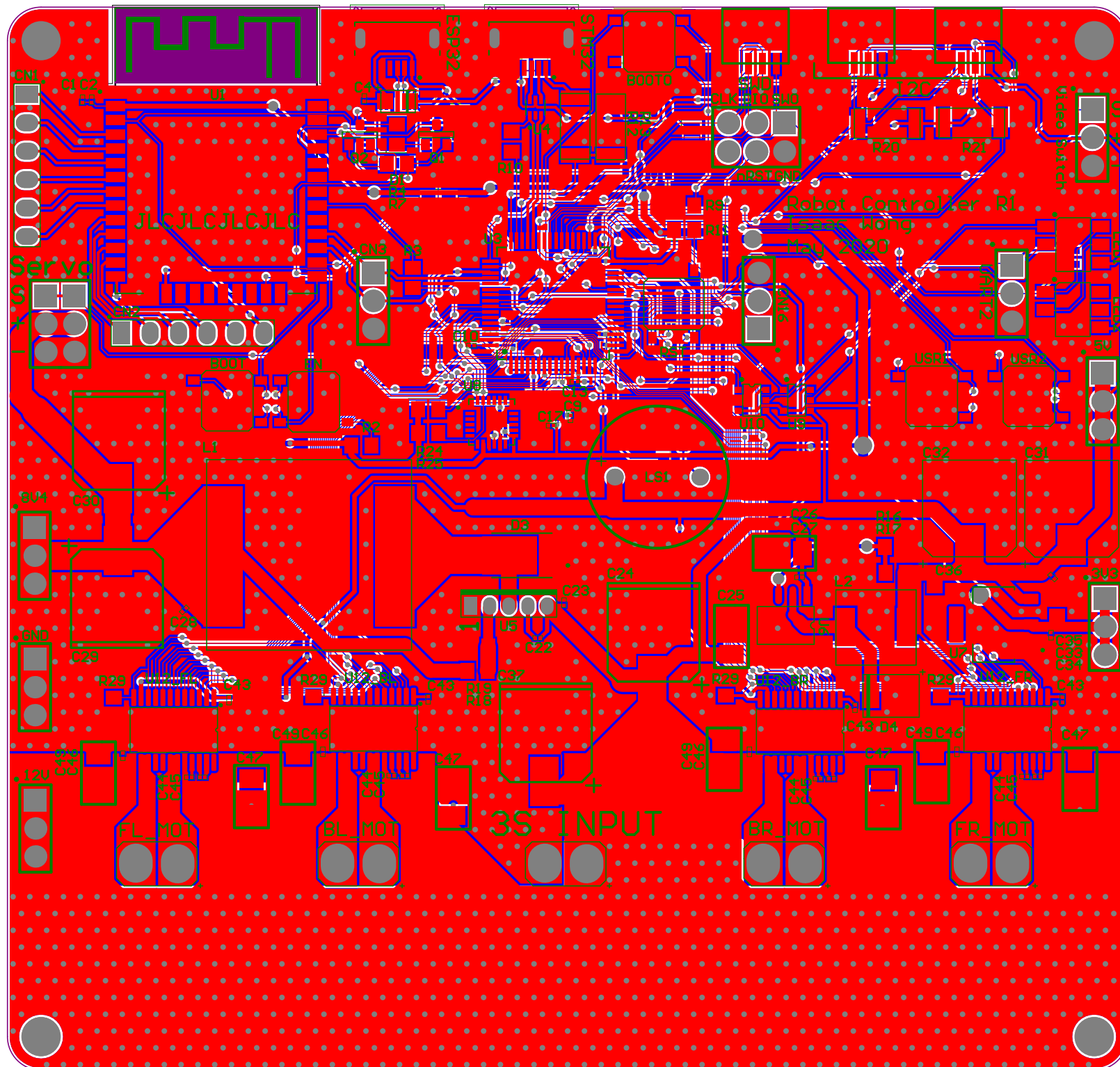


B

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D

Title		
Size A3	Number	Revision
Date:	01/05/2020	Sheet of
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Comment	Description	Designator	Footprint	LibRef	Quantity
ESP32_P1		C1, C2	0402	Cap	2
P6		C3	0402	Cap	1
P7		C4	0402	Cap	1
		C5, C6, C18, C19, C20, C21, C22, C23, C27, C28, C34, C35, C38, C39, C40, C41, C42, C43_BL, C43_BR, C43_FL, C43_FR, C44_BL, C44_BR, C44_FL, C44_FR, C45_BL, C45_BR, C45_FL, C45_FR, C46_BL, C46_BR, C46_FL, C46_FR			
Cap			0402	Cap	33
Pin 32		C7	0402	Cap	1
Pin 33		C8	0402	Cap	1
X0		C9, C17	0402	Cap	2
		C10, C11	0402	Cap	2
Pin 1		C12	0402	Cap	1
Pin 13		C13	0402	Cap	1
Pin 17		C14	0402	Cap	1
Pin 19		C15	0402	Cap	1
Pin 64		C16	0402	Cap	1
470uF		C24, C29, C30, C37	10x12mm-Electrolytic	Polarised Capacitor	4
		C25, C26, C47_BL, C47_BR, C47_FL, C47_FR, C48_BL, C48_BR, C48_FL, C48_FR, C49_BL, C49_BR, C49_FL, C49_FR			
Cap			1206	Cap	14
100uF		C31, C32	8x10.2 Cap	Polarised Capacitor	2
Cap		C33, C36	0805 - duplicate	Cap	2
6P-2.5mm		CN1, CN2	6-Pin-Header	6P-2.5mm	2
		CN3, CN6, CN8, CN9, CN10, CN11, CN12, CN14, CN15, CN16, CN18, CN20			
3P-2.5mm			2.5mm-3P	3P-2.5mm	12
		CN4, CN13, CN17, CN19, CN21, CN22, CN23, CN24	JST_GH-4P	JST_GH-4P	8
JST_GH-4P		CN5	2.5mm-3P	3P-2.5mm	1
Power In		CN7	Power_Leads	JST_Leads_In	1
FL_MOT		CN25	Power_Leads	JST_Leads_In	1
FR_MOT		CN26	Power_Leads	JST_Leads_In	1
BL_MOT		CN27	Power_Leads	JST_Leads_In	1
BR_MOT		CN28	Power_Leads	JST_Leads_In	1
SS12F		D1, D2, D5, D6	SMAF_DIODE	SS12F	4
Diode		D3	PowerDI5	Diode	1
SS24	2A Schottky Diode	D4	DO-214AA	SS24	1
	USB - micro B USB 2.0 Receptacle Connector 5 Position Surface Mount, Right Angle Through Hole	J1, J2	FCI_10118193-0001LF	10118193-0001LF	2
10118193-0001LF		L1	18x16-9-Inductor	SMD Inductor 18x16.9	1
47uH 8A	TMPC1707	L2	71x66-Inductor	22uH Inductor, 7.1*6.6	1
22uH		LED1, LED2	5x5_WS2812	APA102C	2
APA102C		L51	12-dia-buzzer	Buzzer	1
Buzzer		Q1, Q2, Q3	SOT23-FET	S8050	3
S8050		R1, R2, R4, R6, R7, R9, R11, R14, R15, R17, R18	0805 - duplicate	Resistor	11
10k		R3	0805 - duplicate	Resistor	1
0R		R5, R8, R26	0805 - duplicate	Resistor	3
1k		R10	0805 - duplicate	Resistor	1
1.5k		R12	2010_SMD_Resistor	Resistor	1
10k		R13	2010_SMD_Resistor	Resistor	1
15k		R16	0805 - duplicate	Resistor	1
3.3k		R19	0805 - duplicate	Resistor	1
1.74k		R20, R21	2010_SMD_Resistor	Resistor	2
2k		R22	0805 - duplicate	Resistor	1
20k		R23	0805 - duplicate	Resistor	1
4k		R24, R25	0805 - duplicate	Resistor	2
2k		R27	2010_SMD_Resistor	Resistor	1
120		R28	0805 - duplicate	Resistor	1
100		R29_BL, R29_BR, R29_FL, R29_FR	0805 - duplicate	Resistor	4
150R		SW1, SW2, SW3, SW4	4.8x4.8-SMD-SWITCH	SPST Switch	4
SPST Switch		SW5	4.8x4.8-SMD-SWITCH	SPST Switch	1
USR_BTN2		SW6	4.8x4.8-SMD-SWITCH	SPST Switch	1
USR_BTN1		U1	ESP-WROOM-32	ESP-WROOM-32	1
ESP-WROOM-32	WiFi 802.11b/g/n/d/e/i Transceiver Module 2.4GHz Surface Mount	U2	QFN28G_0.5-5X5MM	CP2102-GMR	1
CP2102-GMR		U3	LQFP64	STM32F373RCTx	1
STM32F373RCTx	17V Clamp 5A, 8/20uA, Ipp Tvs Diode Surface Mount SOT-666	U4	SOT50P160X60-6N	US8LC6-2%P	1
US8LC6-2%P	XL4016	U5	TO220-5L	XL4016	1
XL4016	8A Buck Converter	U6	SOP8-MT3420	XL1509-5	1
XL1509-ADJ	SoI223/Pkg 1-Amp 3.3-Volt Low Drop Out Voltage Regulator	U7	SOT229P700X180-4N	AMS1117-3.3	1
AMS1117-3.3	Accelerometer, Gyroscope, 6 Axis Sensor I2C Output	U8	QFN50P400X400X95-24N	MPU-6050	1
MPU-6050	Level Translator	U9, U10	SOT23-P4ULSSV201	P4ULSSV201	2
P4ULSSV201	CAN Transceiver	U11	SOIC8-TL_CAN	SN65HVD230	1
SN65HVD230		U12_BL, U12_BR, U12_FL, U12_FR	HTSSOP24	DRV8873S	4
DRV8873S	8MHz 3225 SMD Oscillator	X1	3.2x2.5 SMD	8MHz 3225 SMD Oscillator	1