

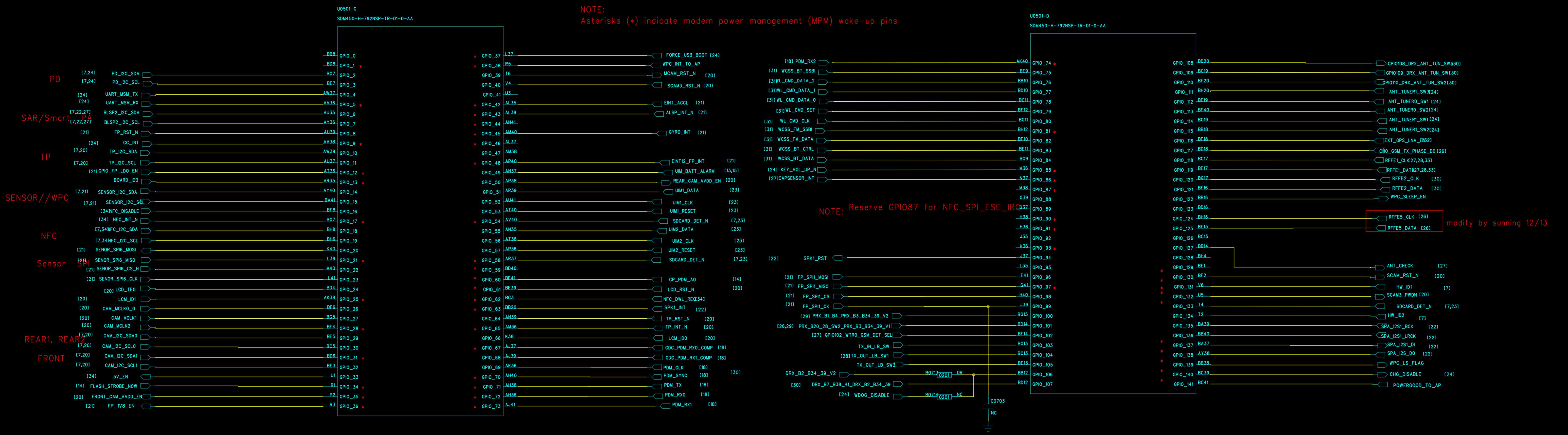


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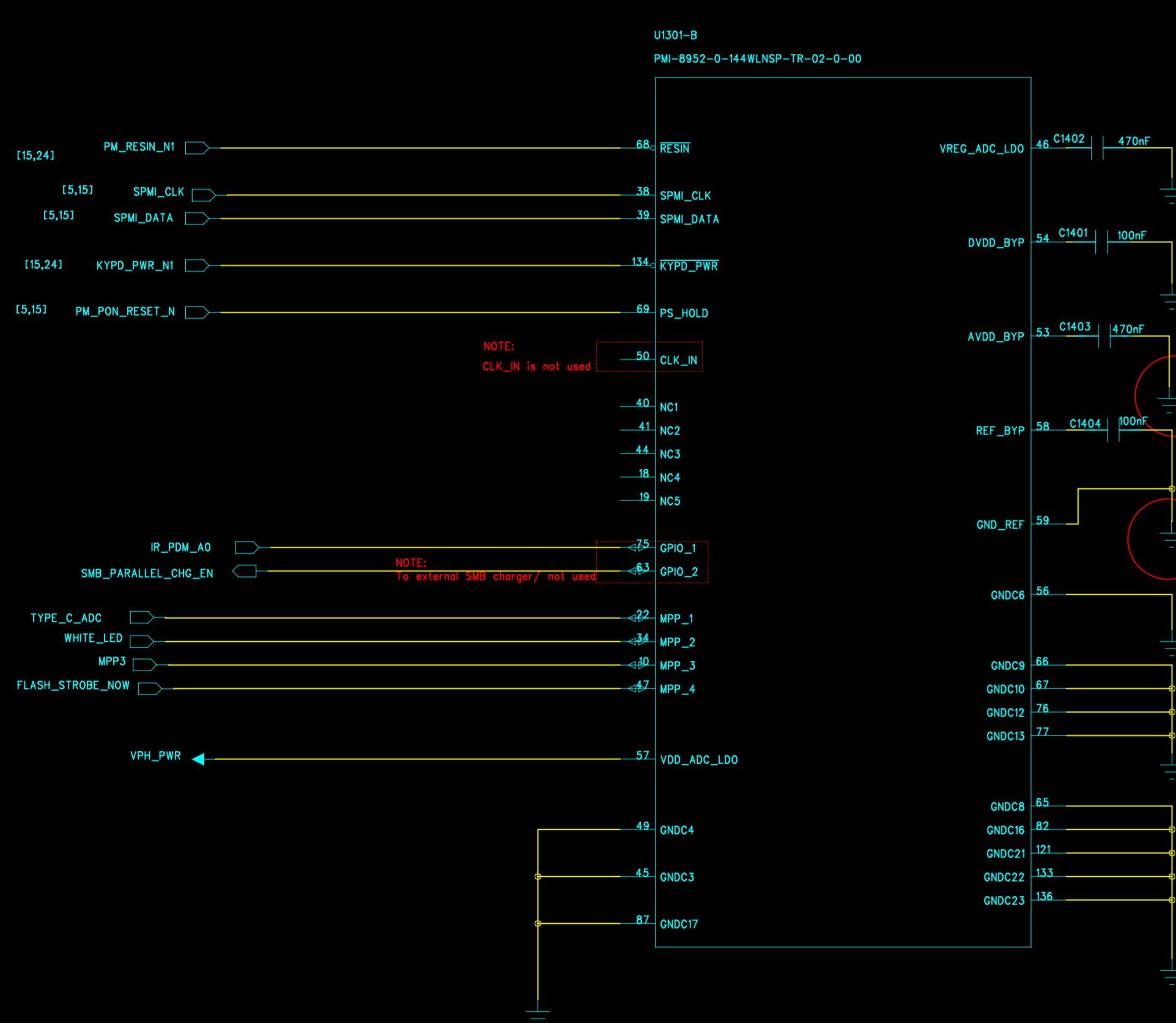




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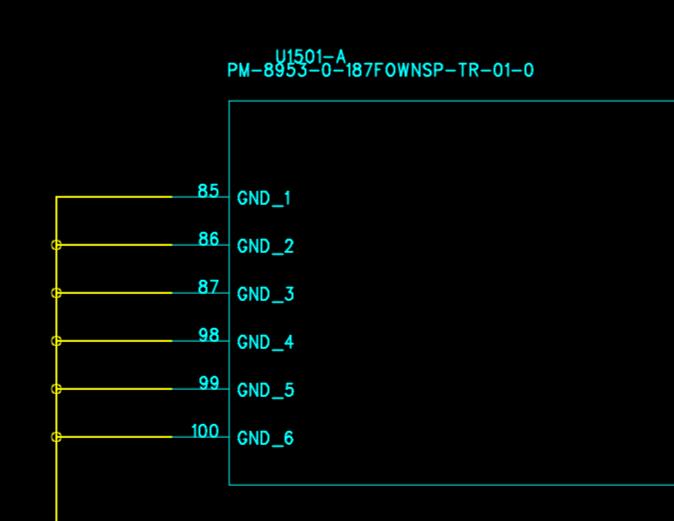
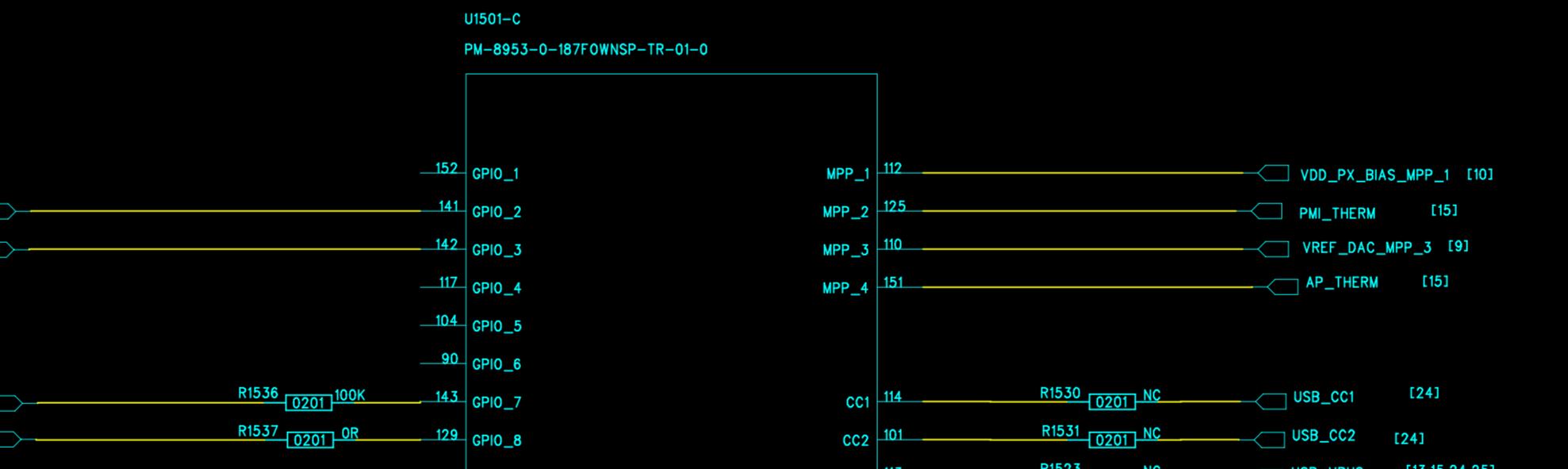
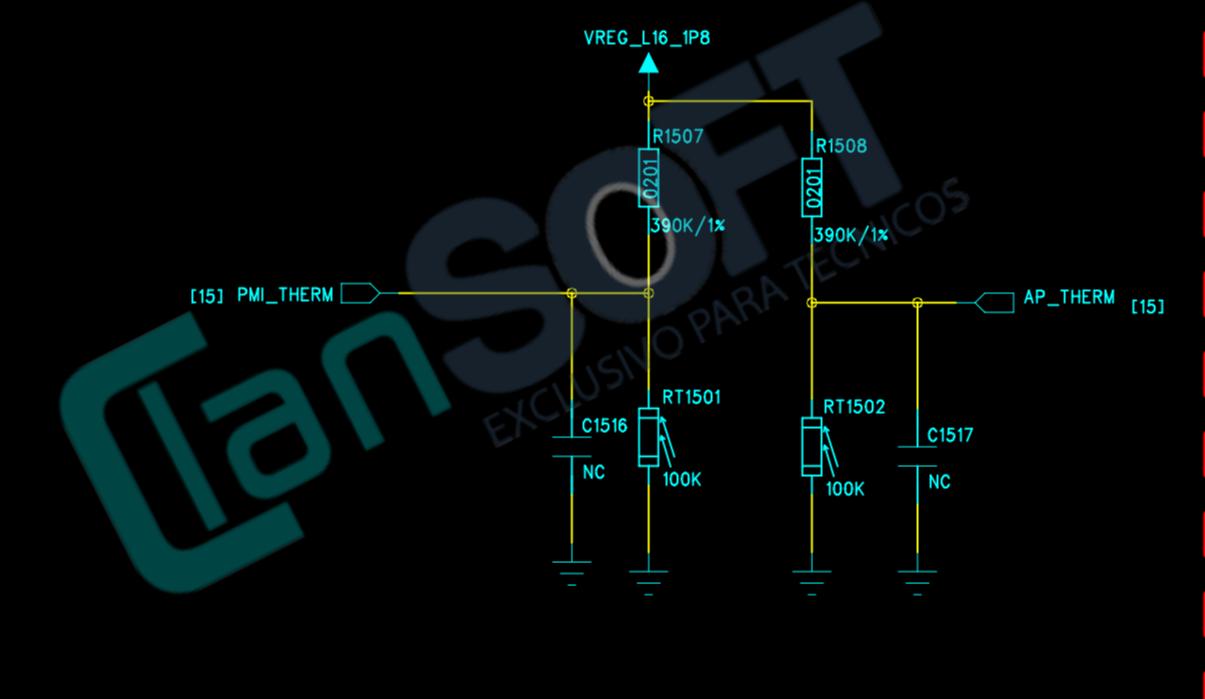
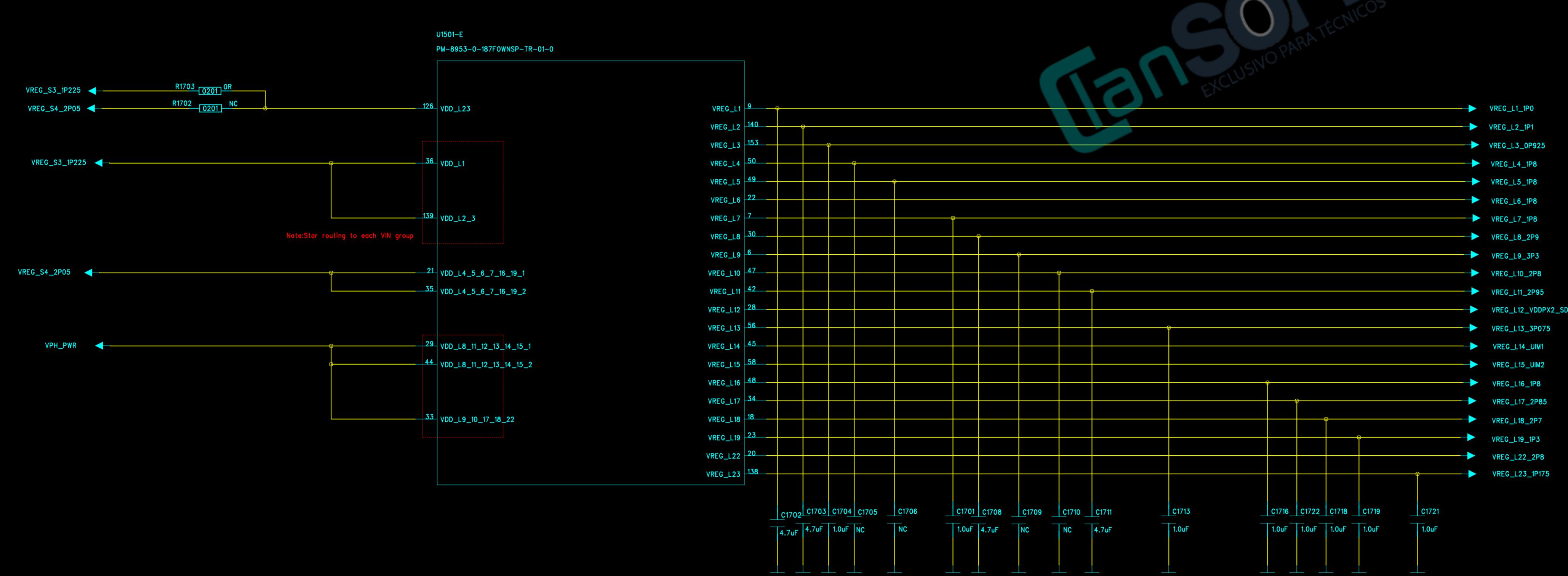


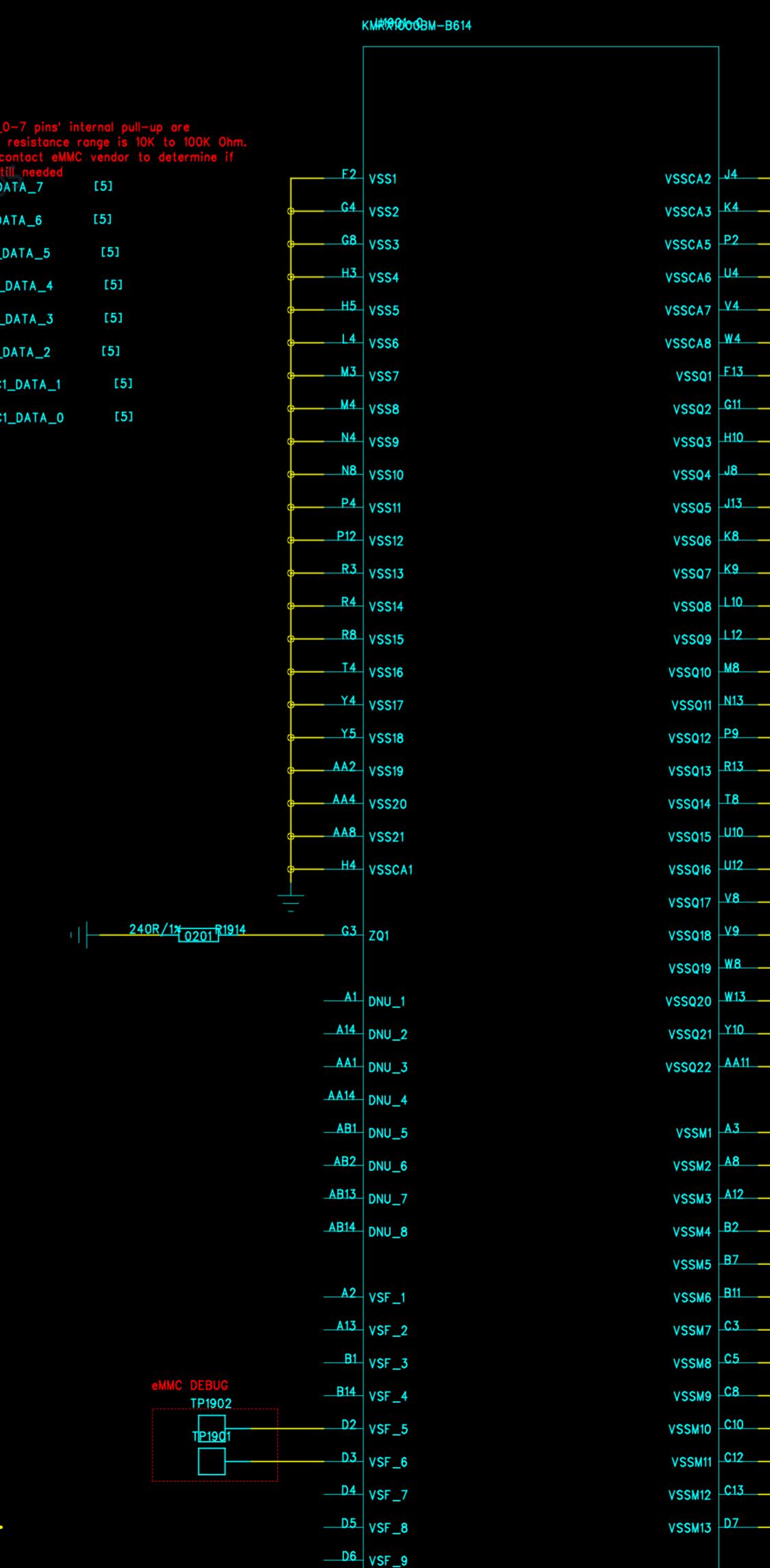
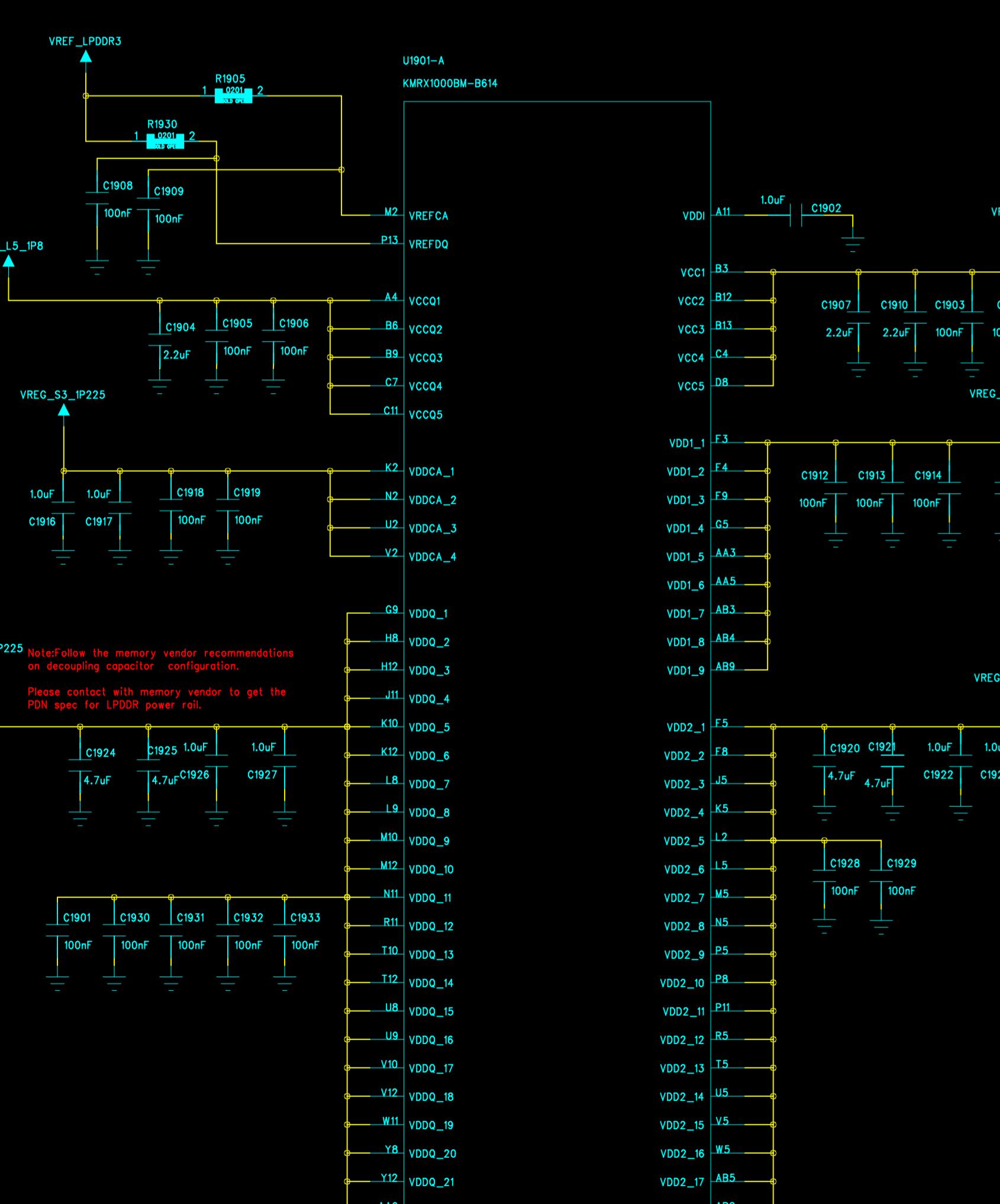


Table 3-6 PM8937/PM8940 regulators and their intended uses

Function	Circuit type	Default V (V) <sup>1</sup>	Specified range (V) <sup>2</sup> (MSM8937)	Programmable range (V)	Rated current (mA)	Default on	Expected use (MSM8937)
S1	ULT-SMPs	1.225	0.900–1.350	0.375–1.5625	2000 <sup>3</sup>	N	MSM modem
S2	ULT-SMPs	1.225	0.550–1.350	0.375–1.5625	3000	Y	MSM core and graphics
S3	HF-SMPs	1.288	1.200–1.4125	0.375–1.5625	2700	Y	Low-voltage LDOs (1, 3, 19, and 23)
S4	ULT-SMPs	2.050	1.800–2.050	1.550–3.125	2500	Y	High-voltage LDOs (4, 5, 6, 7, 16, RFCLK, and XO)
S5	FT-SMPs	1.225	1.050–1.350	0.350–1.355	3000	Y	MSM applications processor
S6	FT-SMPs	1.225	1.050–1.350	0.350–1.355	3000	N	MSM applications processor
L1	NMOS LDO	1.000	1.000	0.375–1.5375	1200	N	RFICs
L2	NMOS LDO	—1.200—	—1.200—	0.375–1.5375	1200	Y	LPDDR2/LPDDR3, MIPI CSI, and DSI
L3	NMOS LDO	1.225	0.750–1.350	0.375–1.5375	1200	Y	VDDMX
L4	PMOS LDO	1.800	1.800	1.750–3.3375	450	N	RFICs and GPS eLNA
L5 <sup>4</sup>	PMOS LDO	1.800	1.800	1.750–3.3375	500	Y	Most digital I/Os, MSM pad groups 3 and 7, LPDDR, and eMMC
L6	PMOS LDO	1.800	1.800	1.750–3.3375	300	N	MSM DS1 PLL and OTP, camera, touchscreen, display, and sensors
L7	PMOS LDO	1.800	1.800	1.750–3.3375	150	Y	MSM analog and PLLs, WCN XO, and PM baseband clock driver
L8	PMOS LDO	2.900	2.900	1.750–3.3375	600	Y	eMMC
L9	PMOS LDO	$V_{out} = 3.3 \text{ V for } V_{BAT} > 3.575 \text{ V}; V_{out} = 3 \text{ V for } V_{BAT} < 3.575 \text{ V}$	3.000–3.300	1.750–3.3375	600	N	WCN
L10	PMOS LDO	2.8	2.800	1.750–3.3375	150	N	Sensors
L11 <sup>5</sup>	PMOS LDO	2.950	2.950	1.750–3.3375	800	Y	Micro SD
L12 <sup>4</sup>	PMOS LDO	2.950	1.800/2.950	1.750–3.3375	150	Y	MSM pad group 2 and SDC2
L13	PMOS LDO	3.075	3.075	1.750–3.3375	50	Y	MSM USB and audio
Function	Circuit type	Default V (V) <sup>1</sup>	Specified range (V) <sup>2</sup> (MSM8937)	Programmable range (V)	Rated current (mA)	Default on	Expected use (MSM8937)
L14 <sup>5</sup>	PMOS LDO	1.800	1.800/2.925/3.050	1.750–3.3375	50	N	MSM pad group 5, dual-voltage UIM1, a
L15 <sup>5</sup>	PMOS LDO	1.800	1.800/2.925/3.050	1.750–3.3375	50	N	MSM pad group 6 and dual-voltage UIM2
L16	PMOS LDO	1.800	1.800	1.750–3.3375	5	N	PMIC HKADC
L17	PMOS LDO	2.850	2.850	1.750–3.3375	600	N	Camera, display, and touchscreen
L18	PMOS LDO	2.700	2.700	1.750–3.3375	150	N	QTI RF front-end
L19	NMOS LDO	1.350	1.350	0.375–1.5375	1200	N	MSM analog, WCN, and WGR
L20	Low-noise LDO	1.74	1.74	1.74–3.3375	5	Y	PMIC XO circuits
L21	Low-noise LDO	1.74	1.74	1.74–3.3375	5	Y	PMIC RF clock buffers
L22	PMOS LDO	2.800	2.800	1.750–3.3375	300	N	Camera – analog
L23	NMOS LDO	1.3	1.2	0.375–1.5375	300	N	Camera – digital







MEMORY(LPDDR3+EMMC V5.1)

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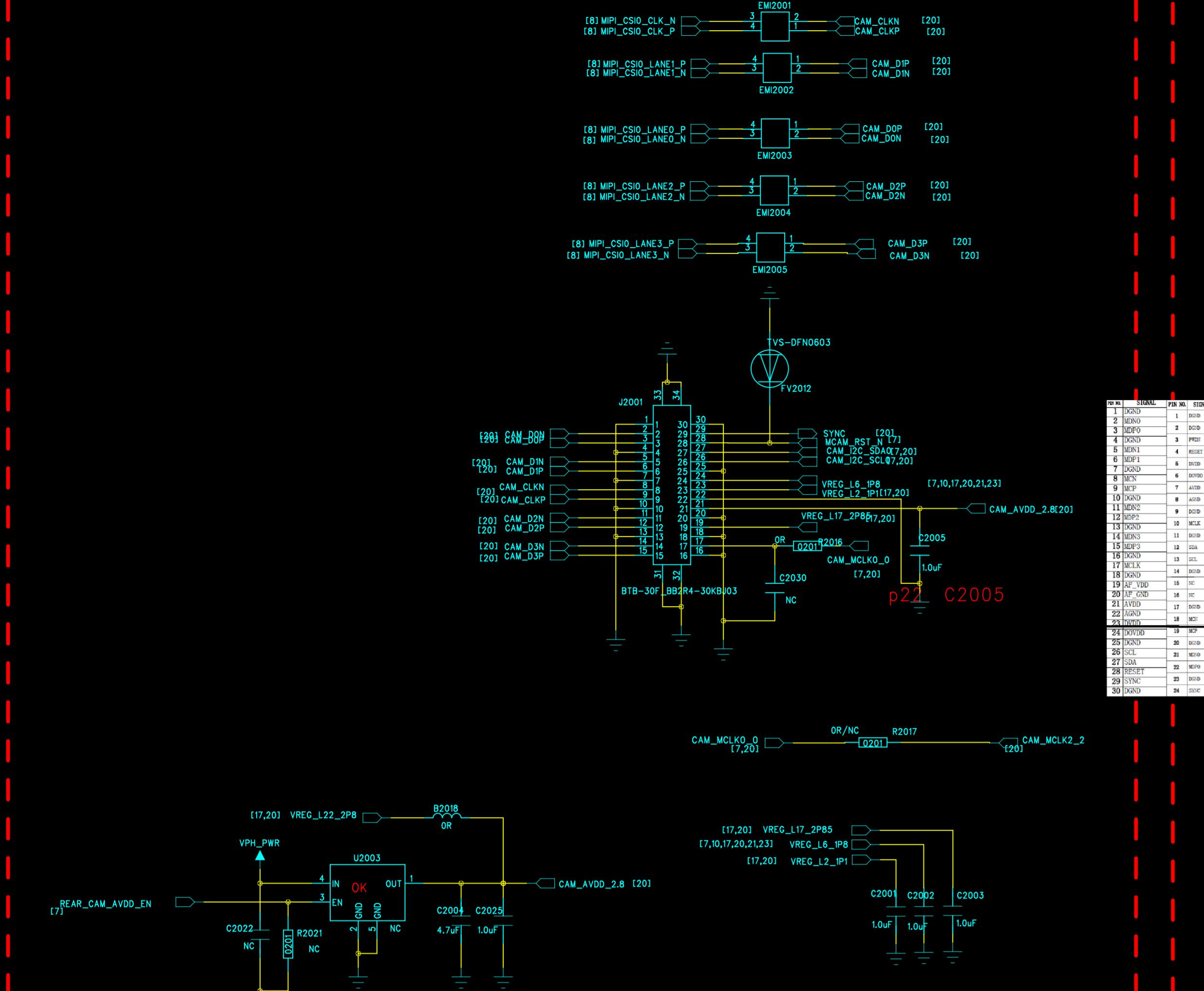
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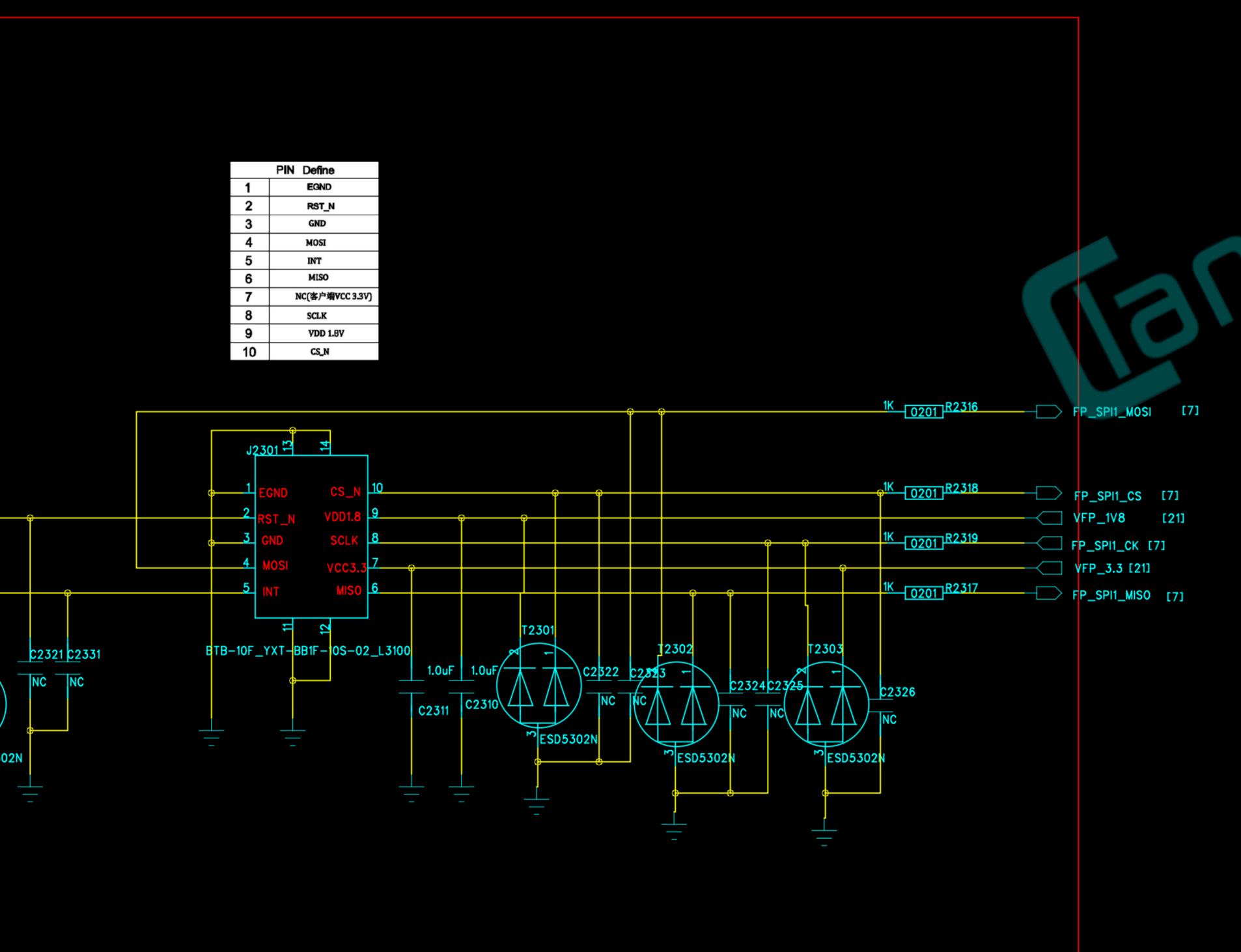
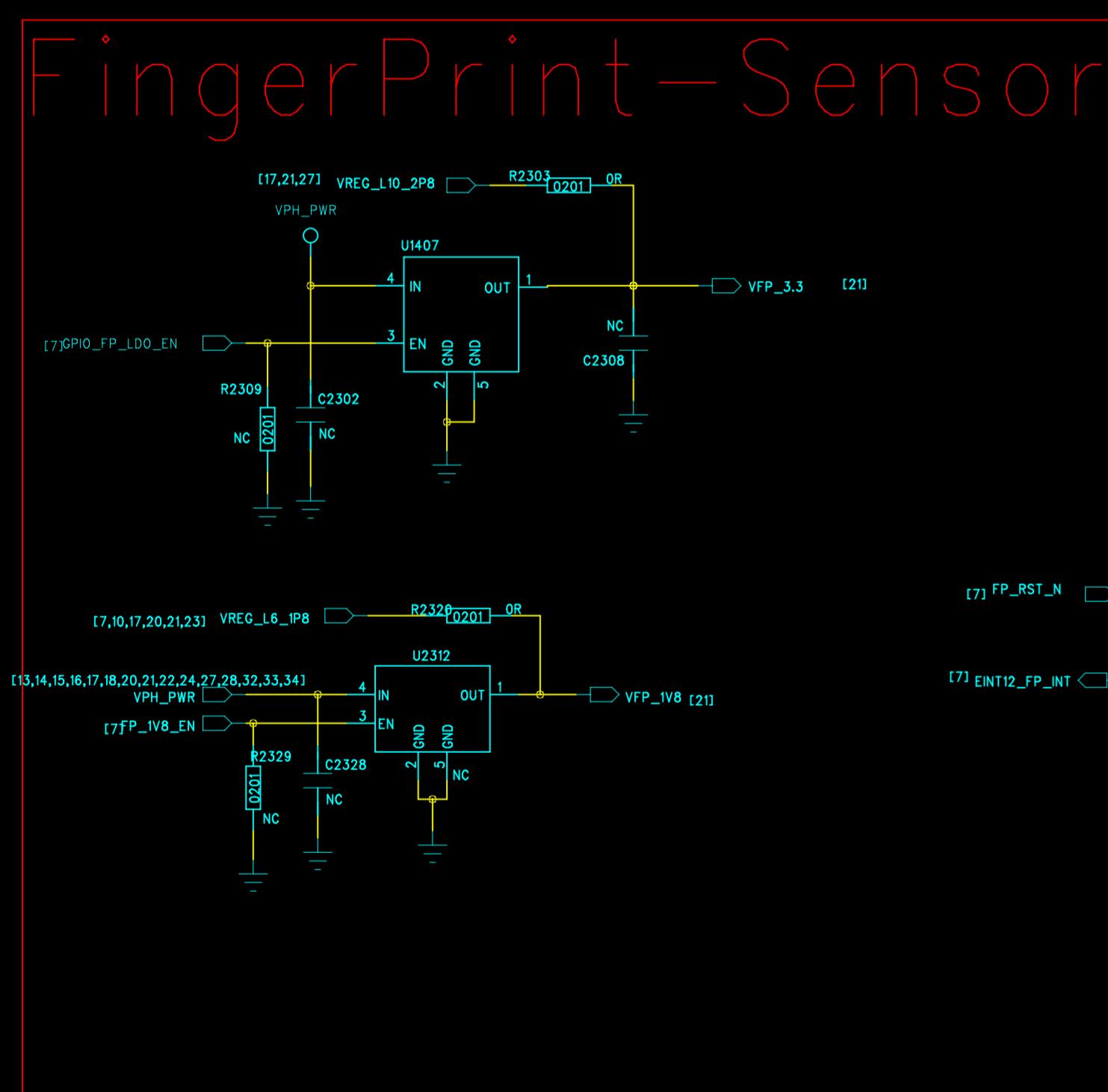
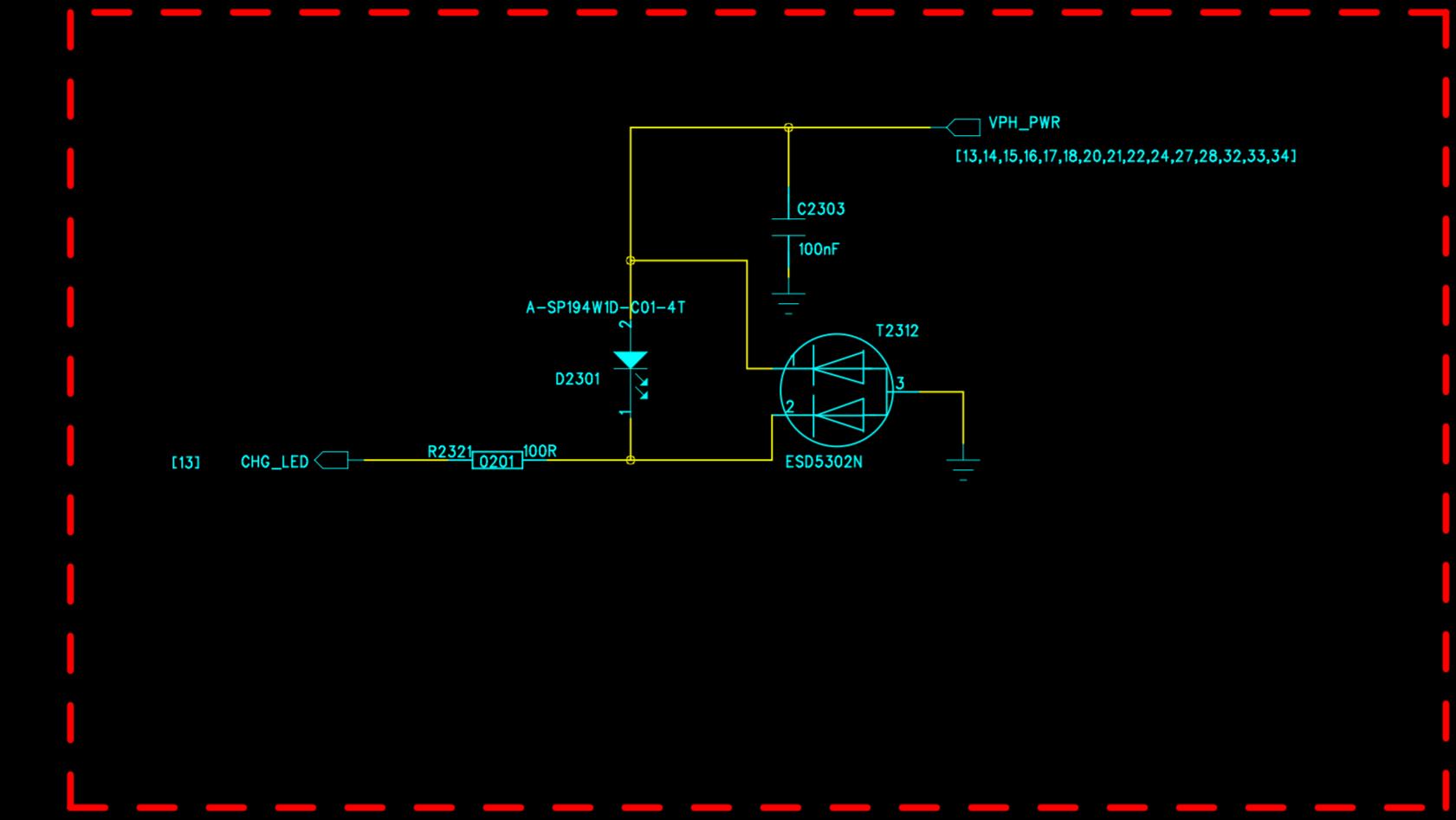
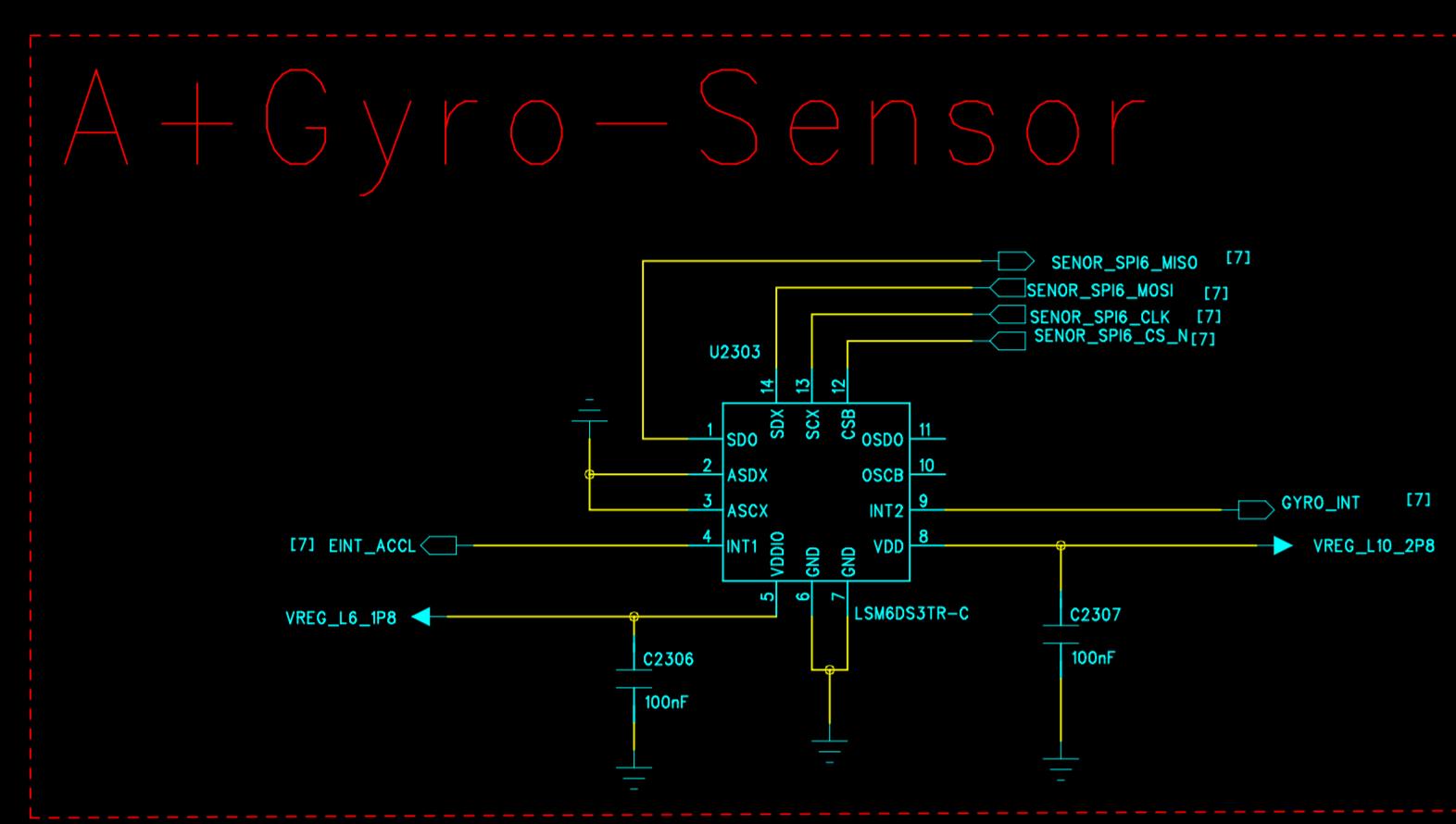
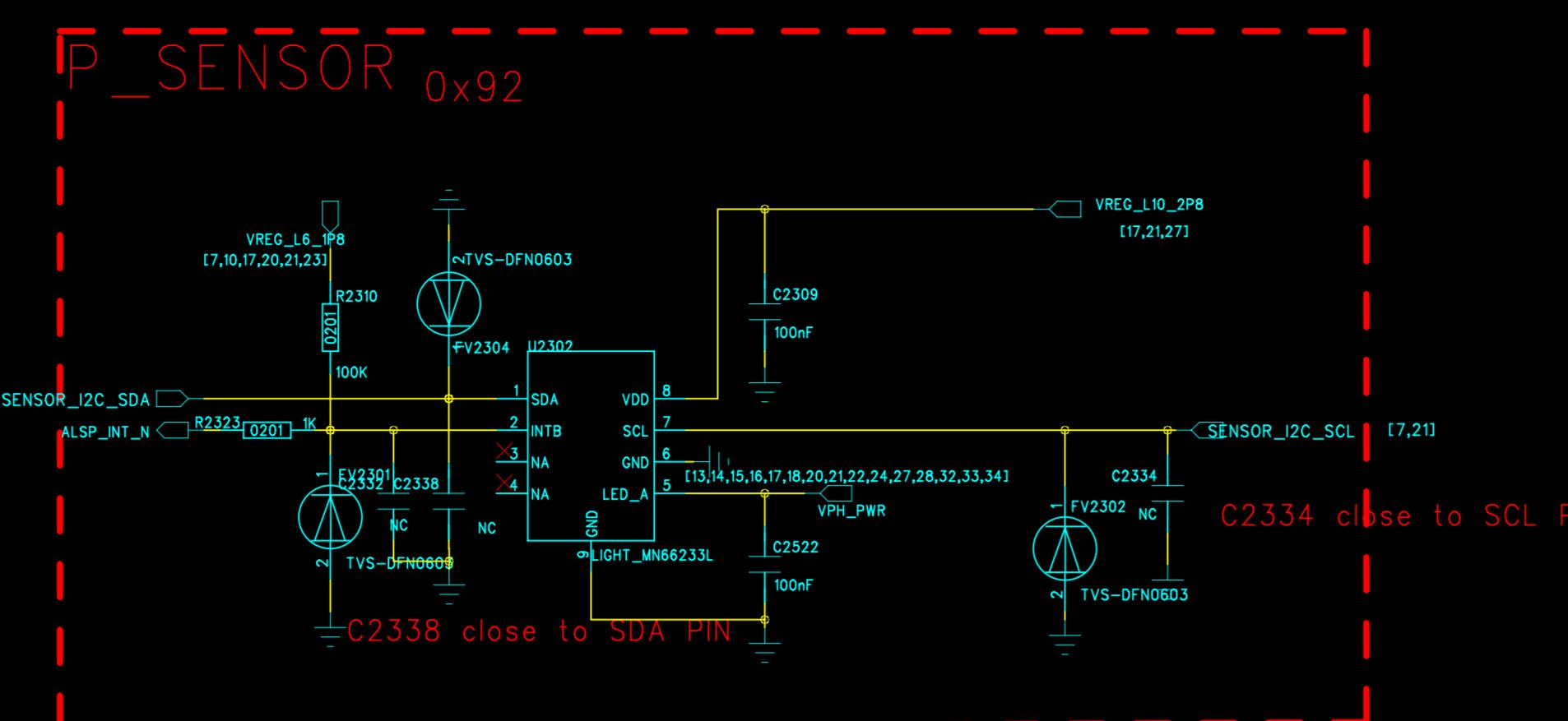
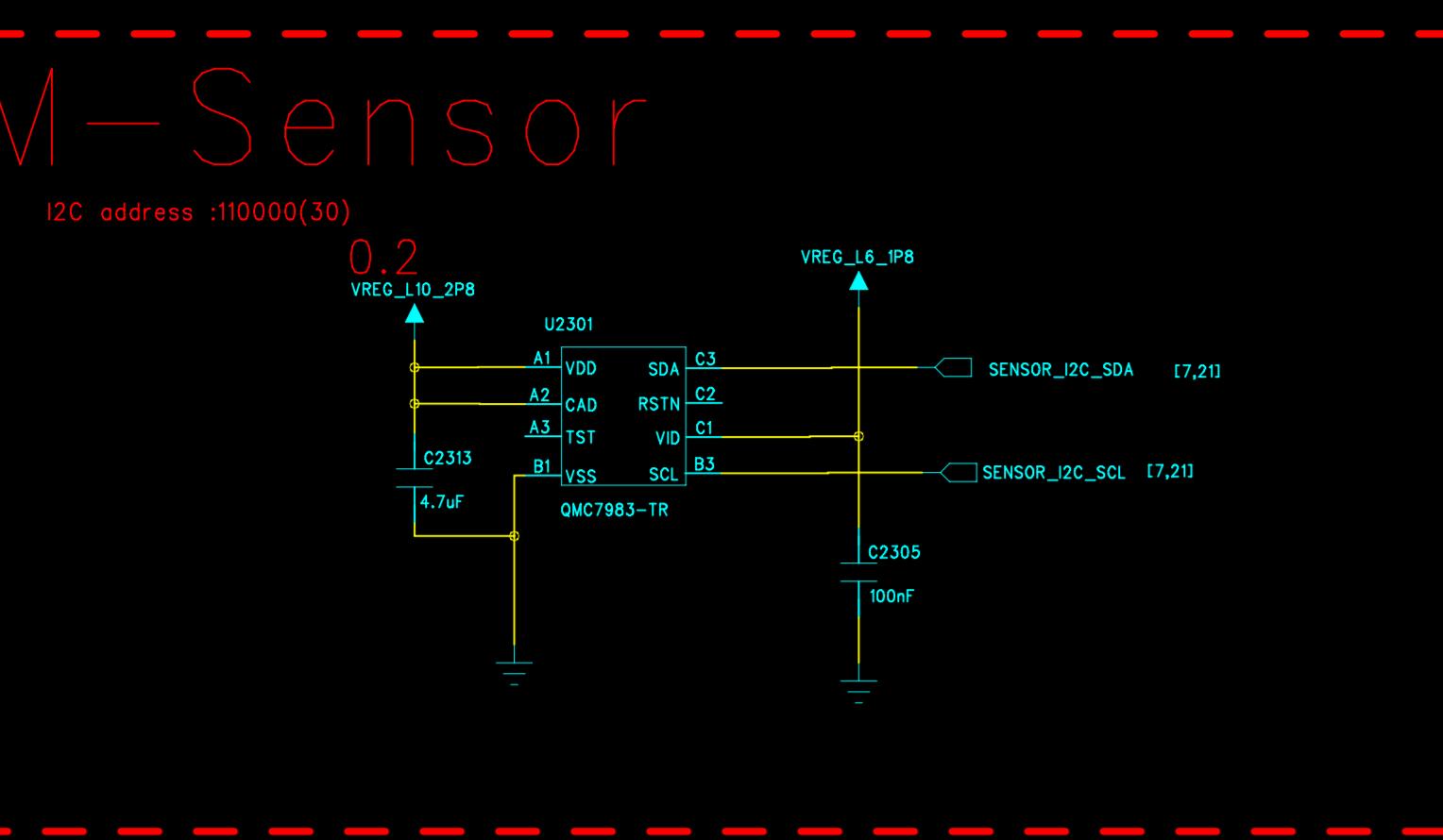
## Main Camera A

## Main Camera B

## LCM



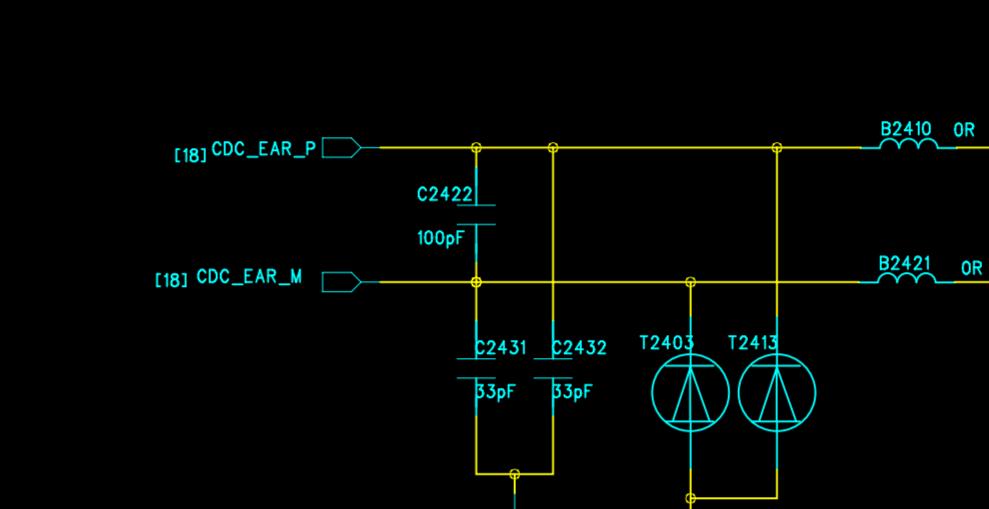
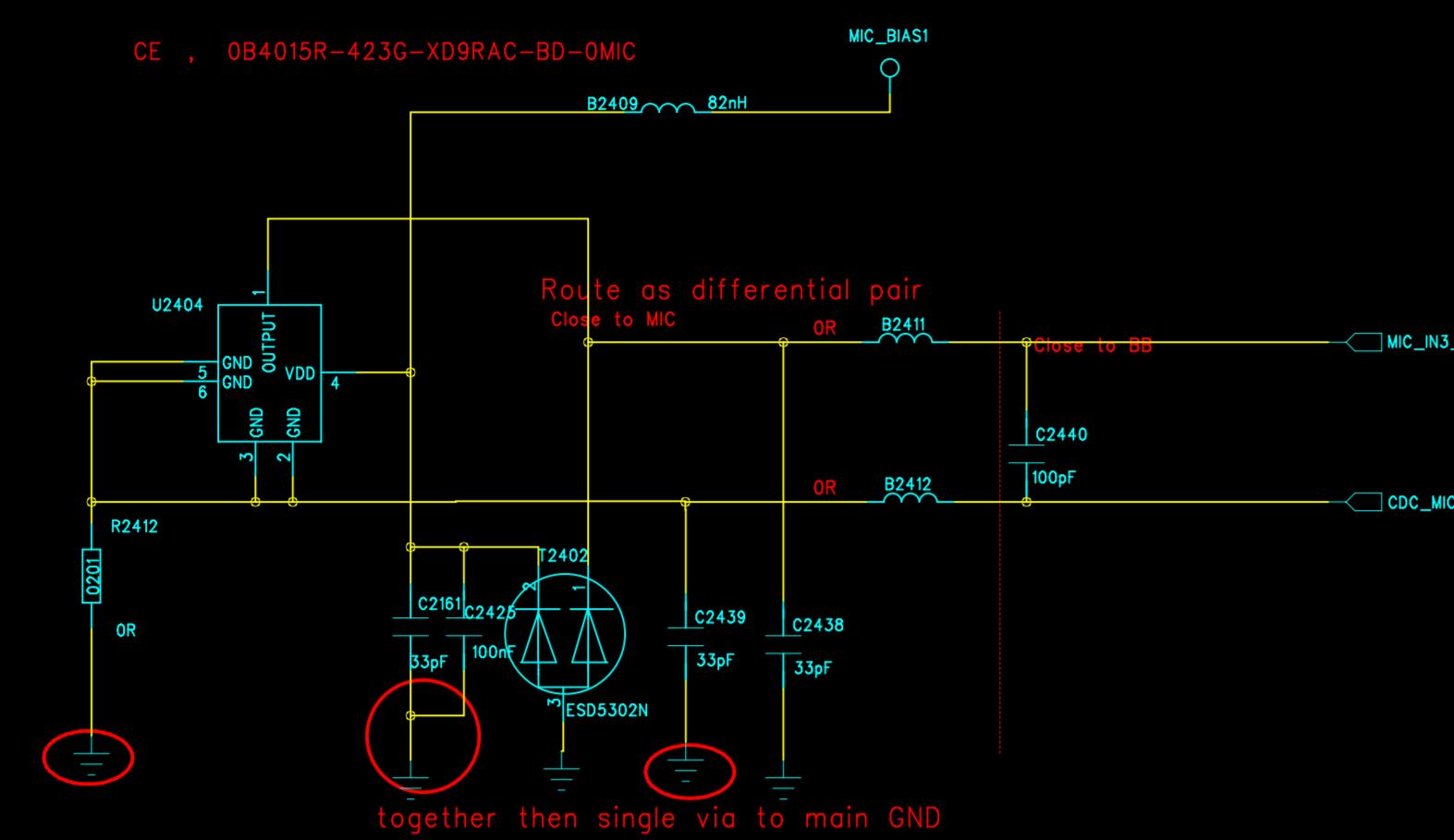
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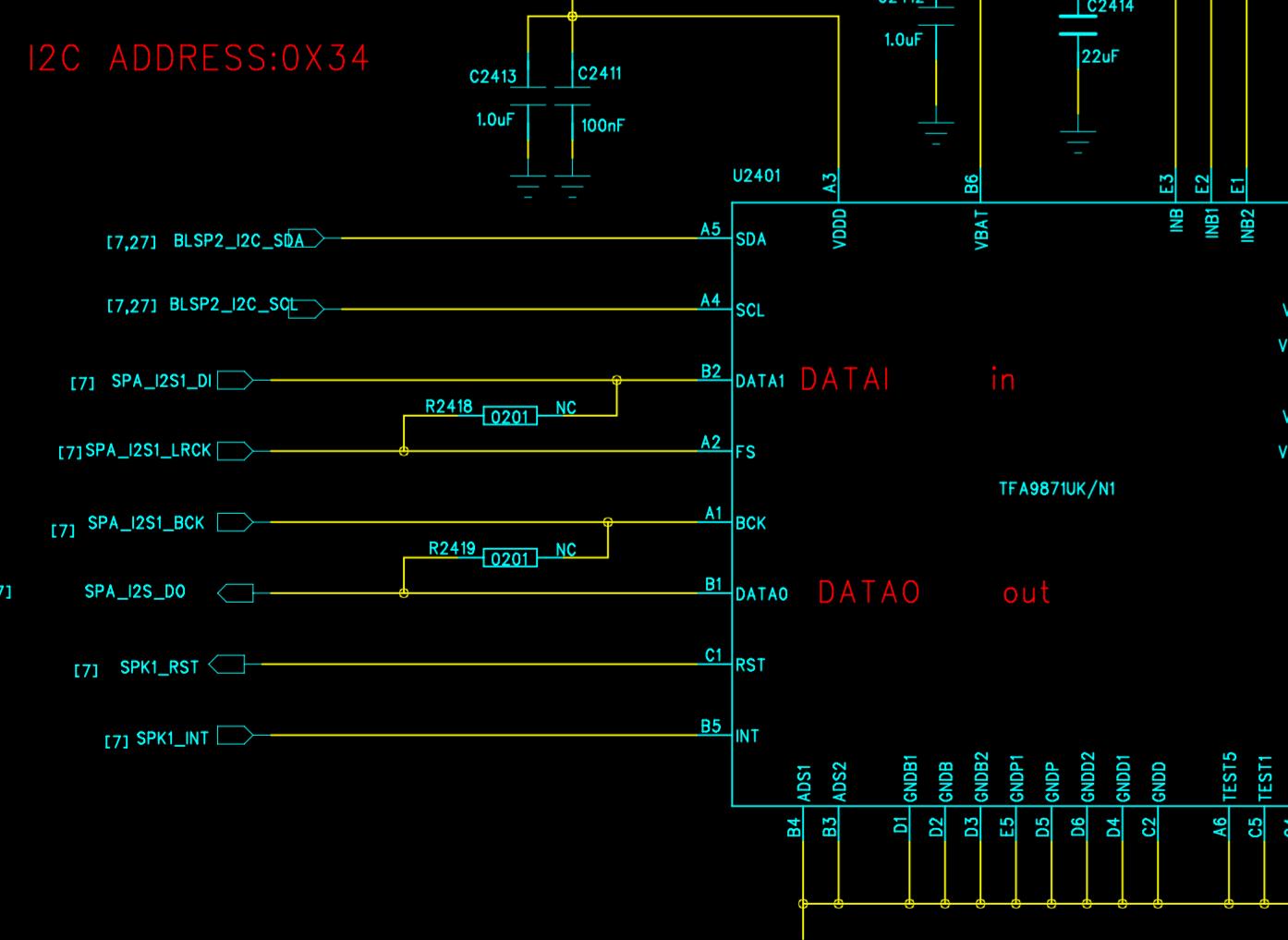
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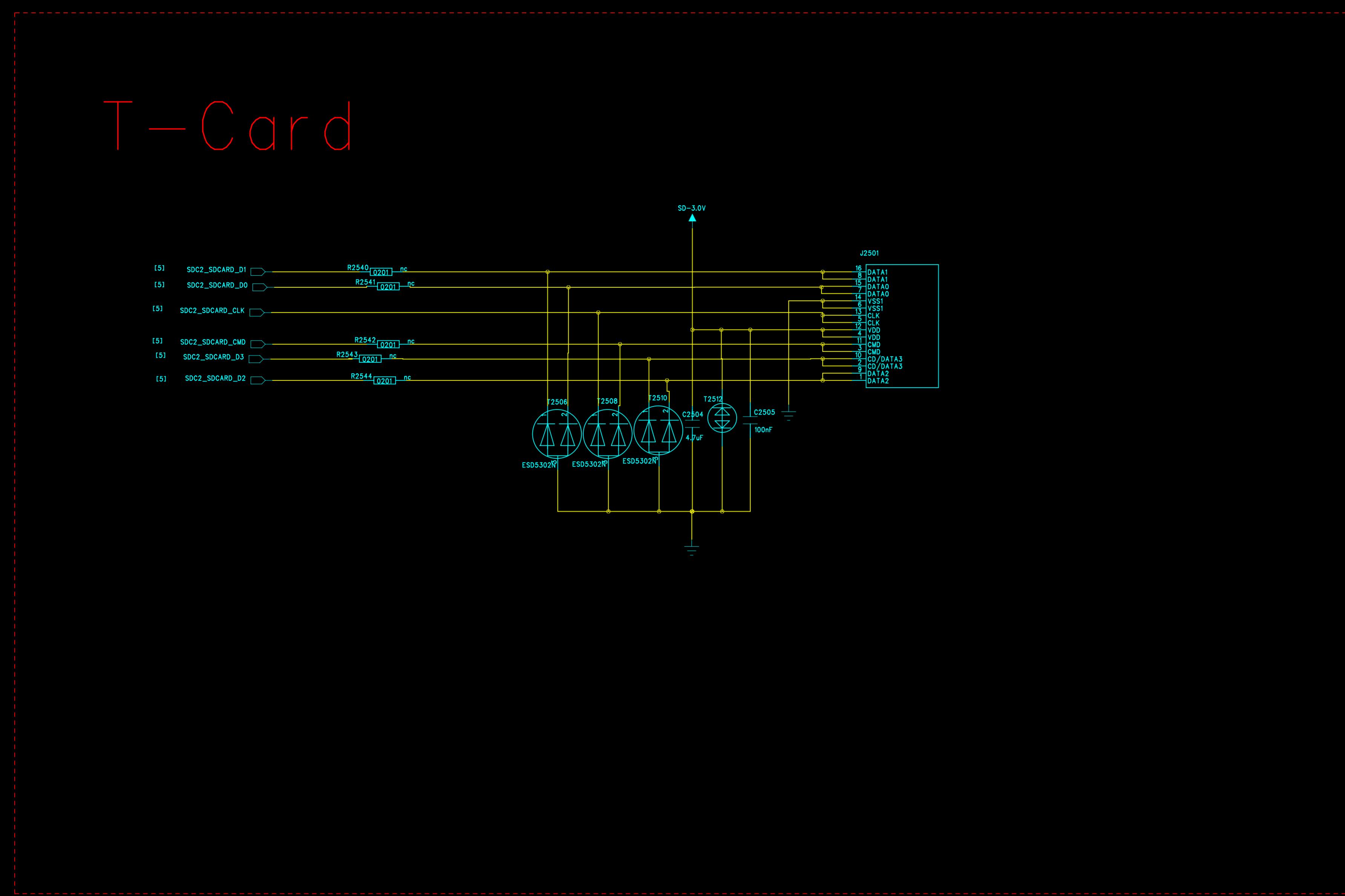
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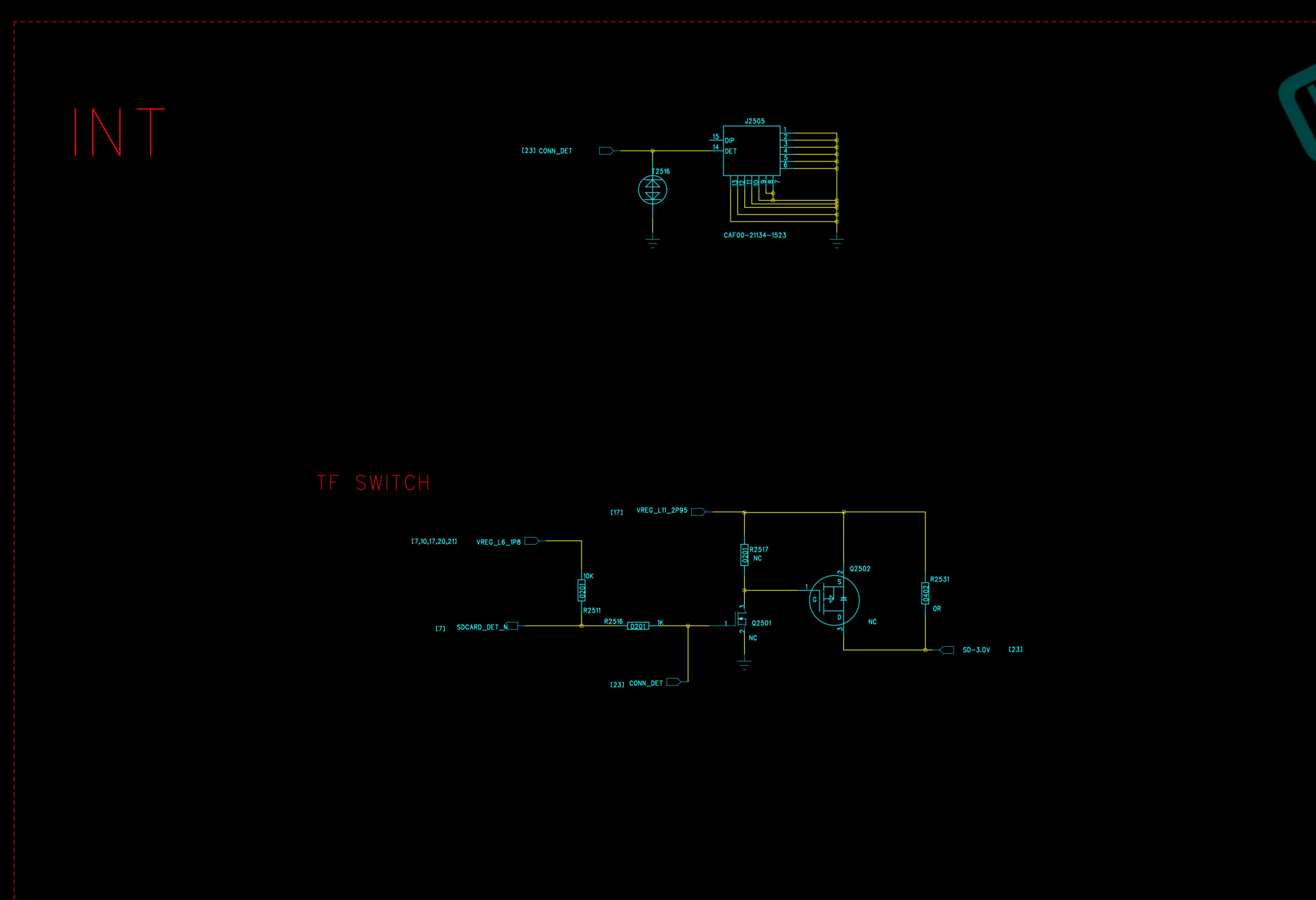
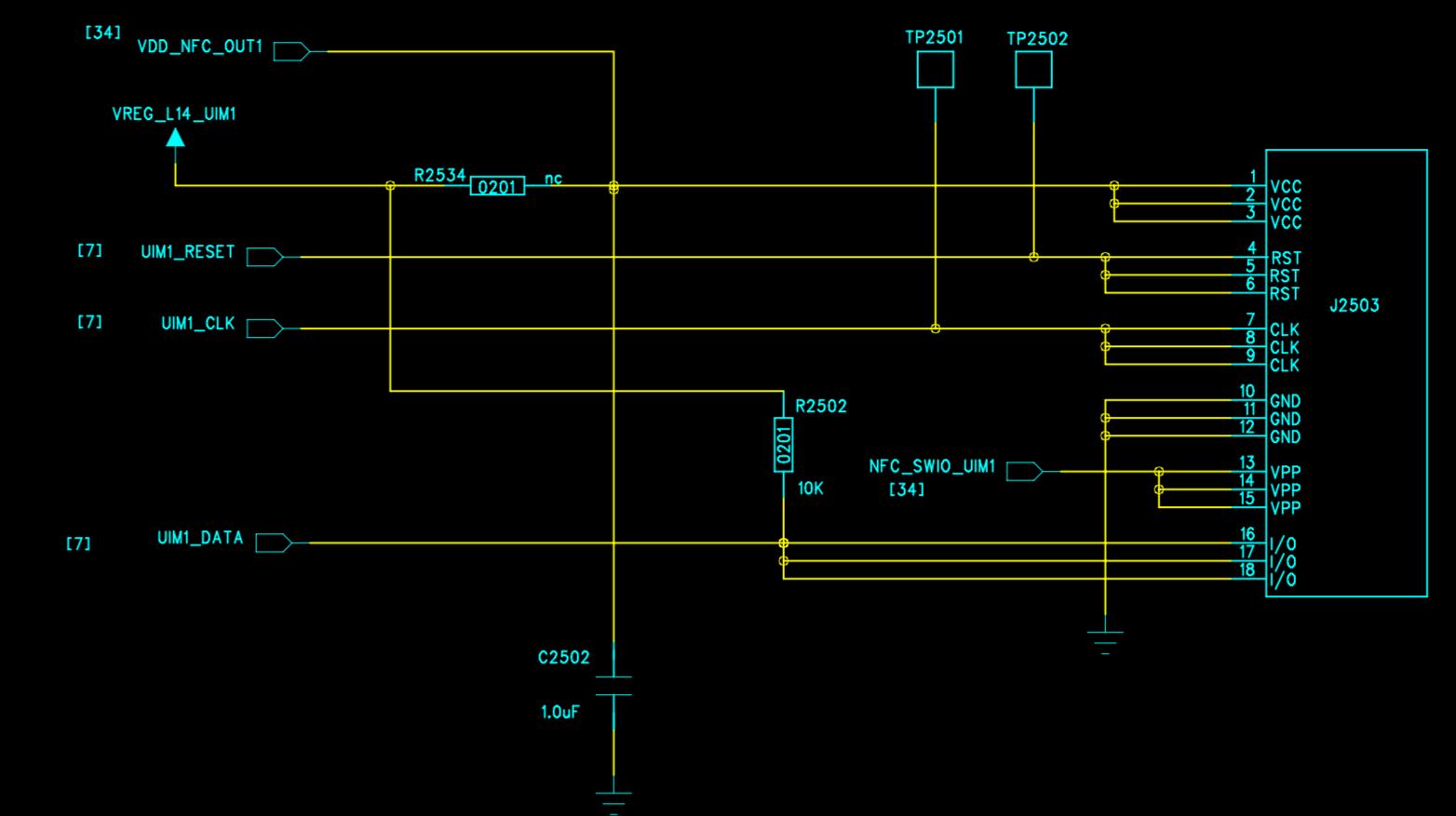


# Audio PA



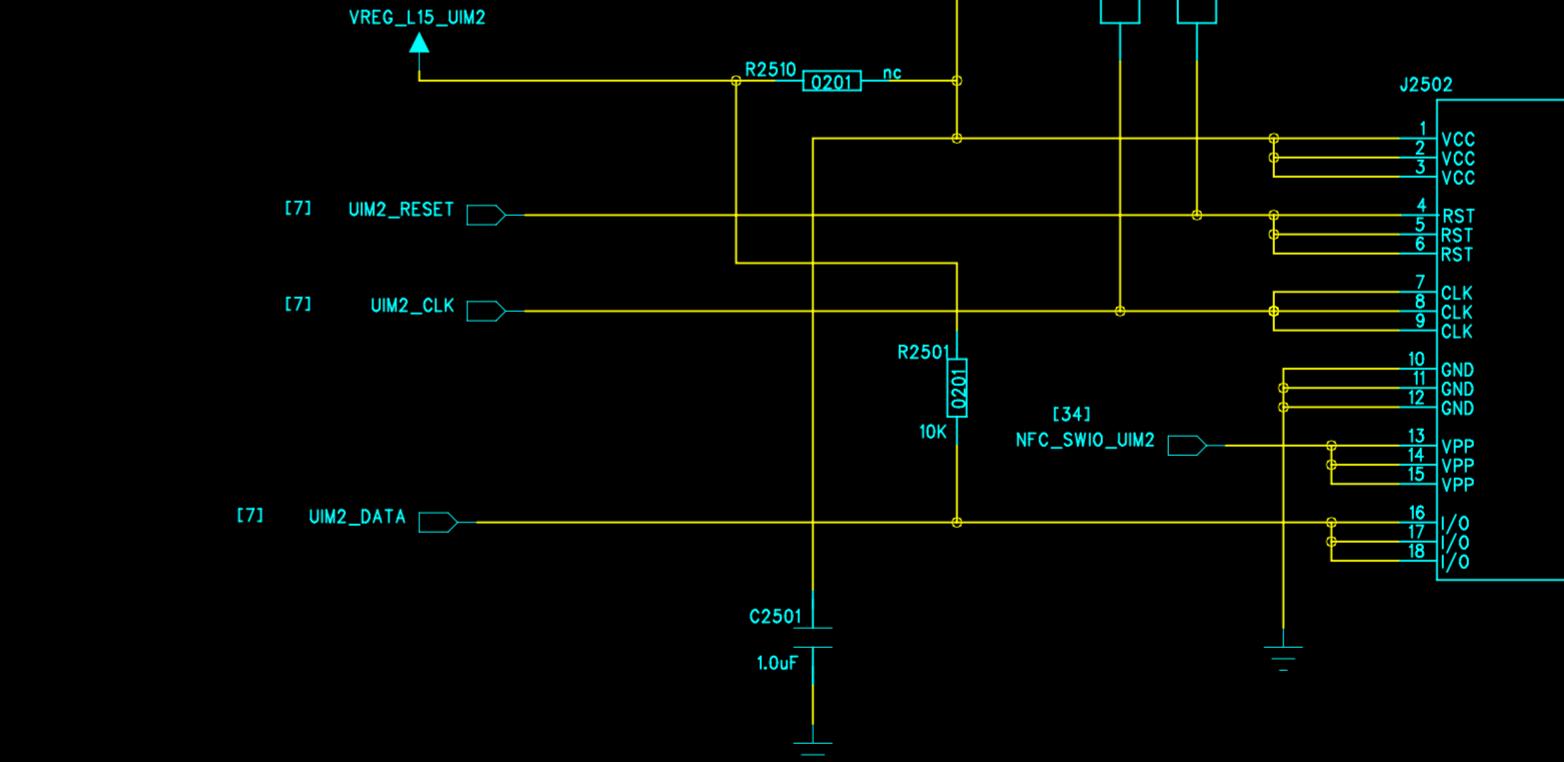


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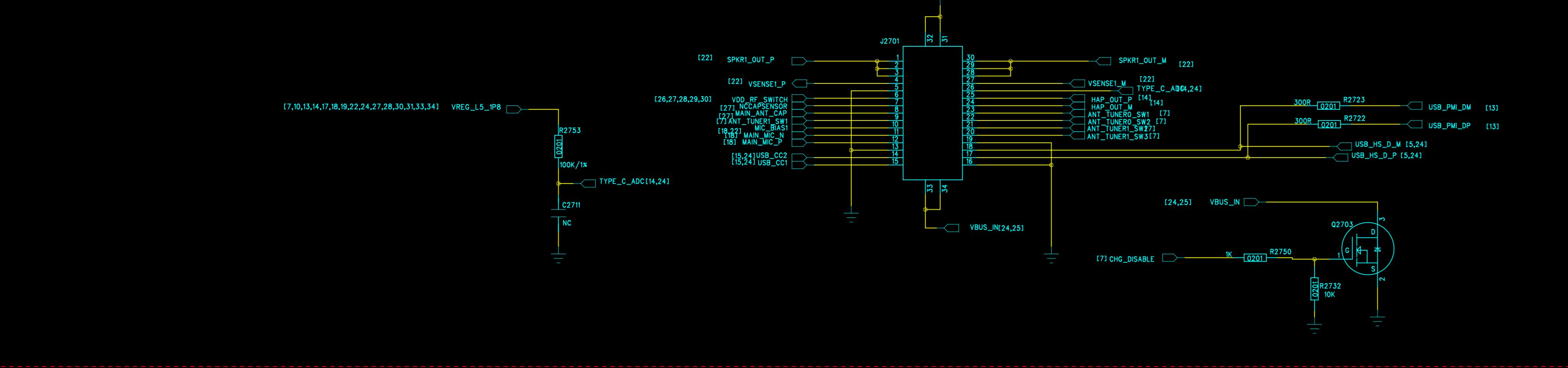
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EXCLUSIVO PARA

SIM2

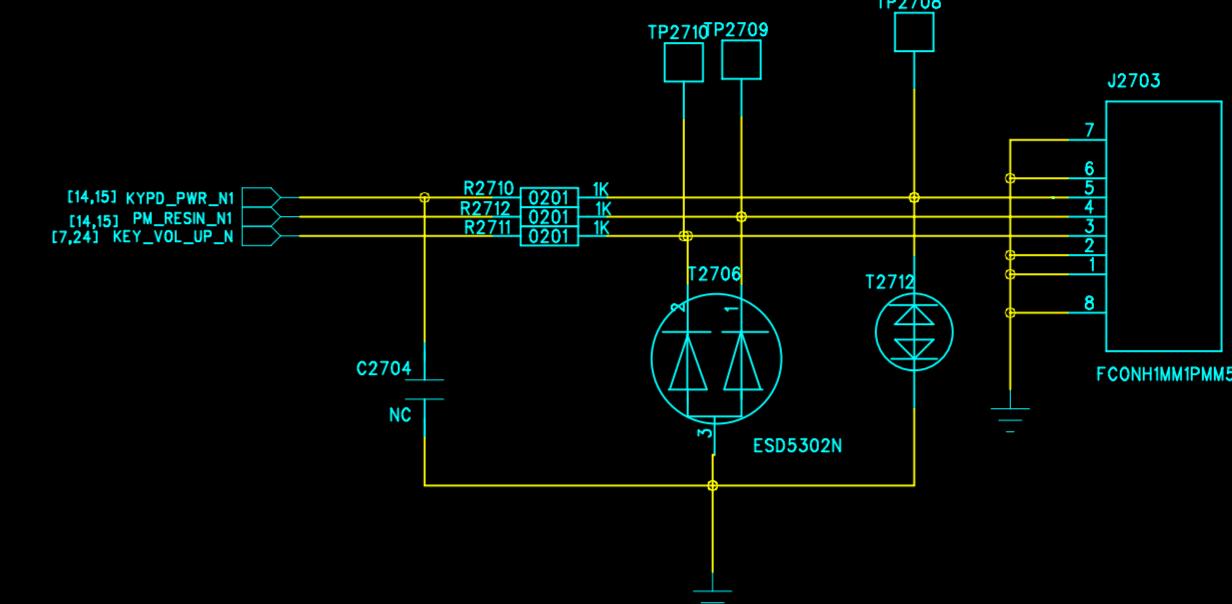


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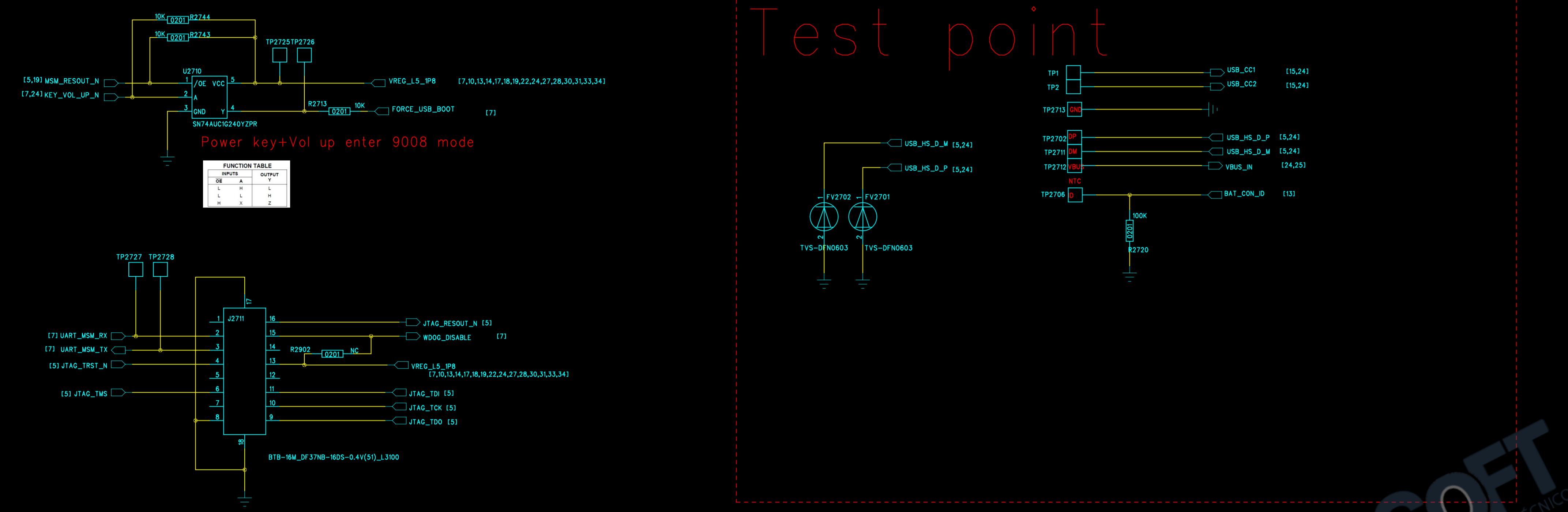
# SUB\_FPC



# Power Key

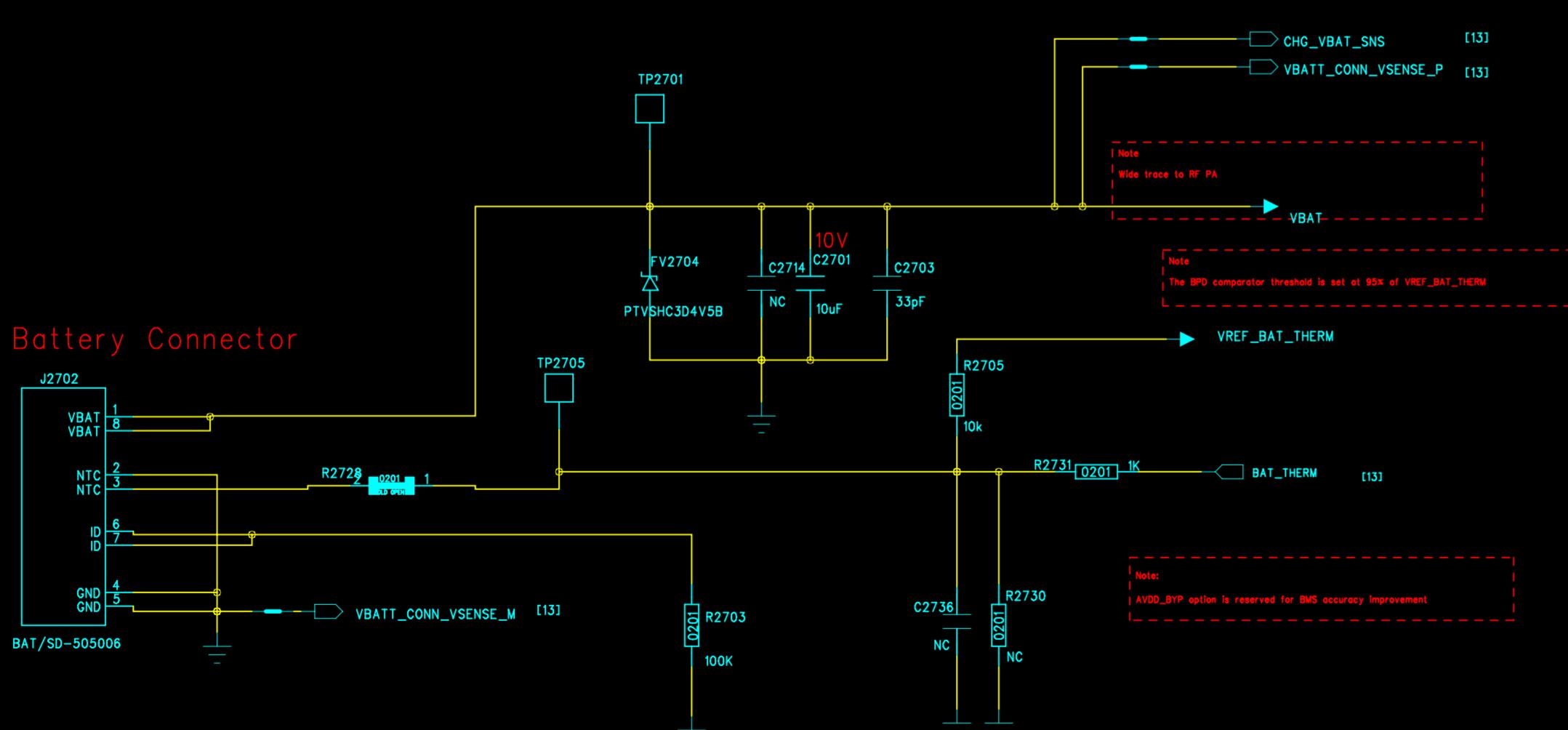


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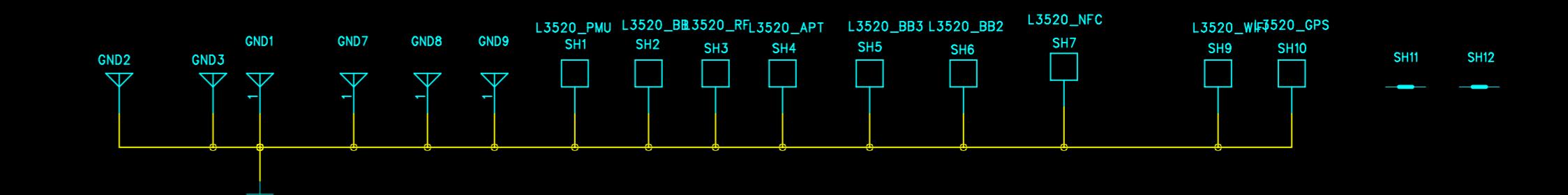
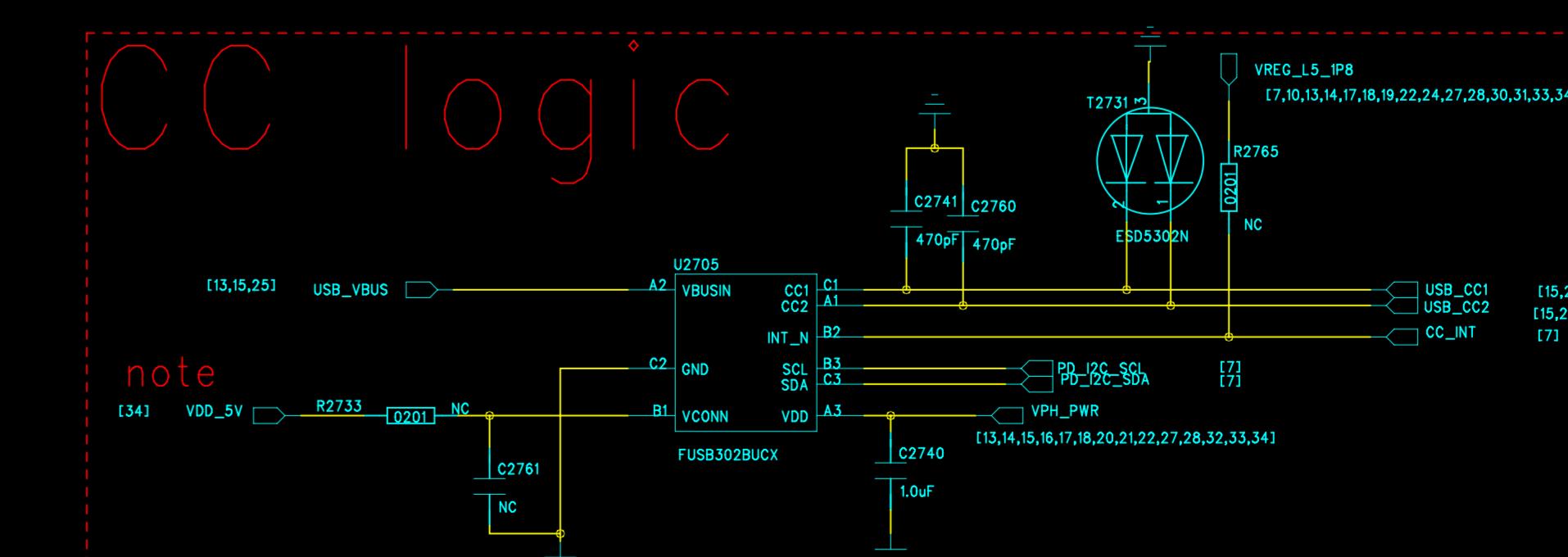


Schematic design notice of "65\_PERI\_Dual\_SIM\_JCUSB\_KEYPAD" page.  
Note 65-1: DO NOT put pull-up resistor on PWRKEY  
Note 65-2: Volume Up : HOME Key / GND  
Volume Down : (KPROW0/KPCOLO) or KPCOLO / GND

# BAT



Note:  
Battery ID resistor value require 20K~150K,  
Add 100k to ground if battery package ID not meet requirement

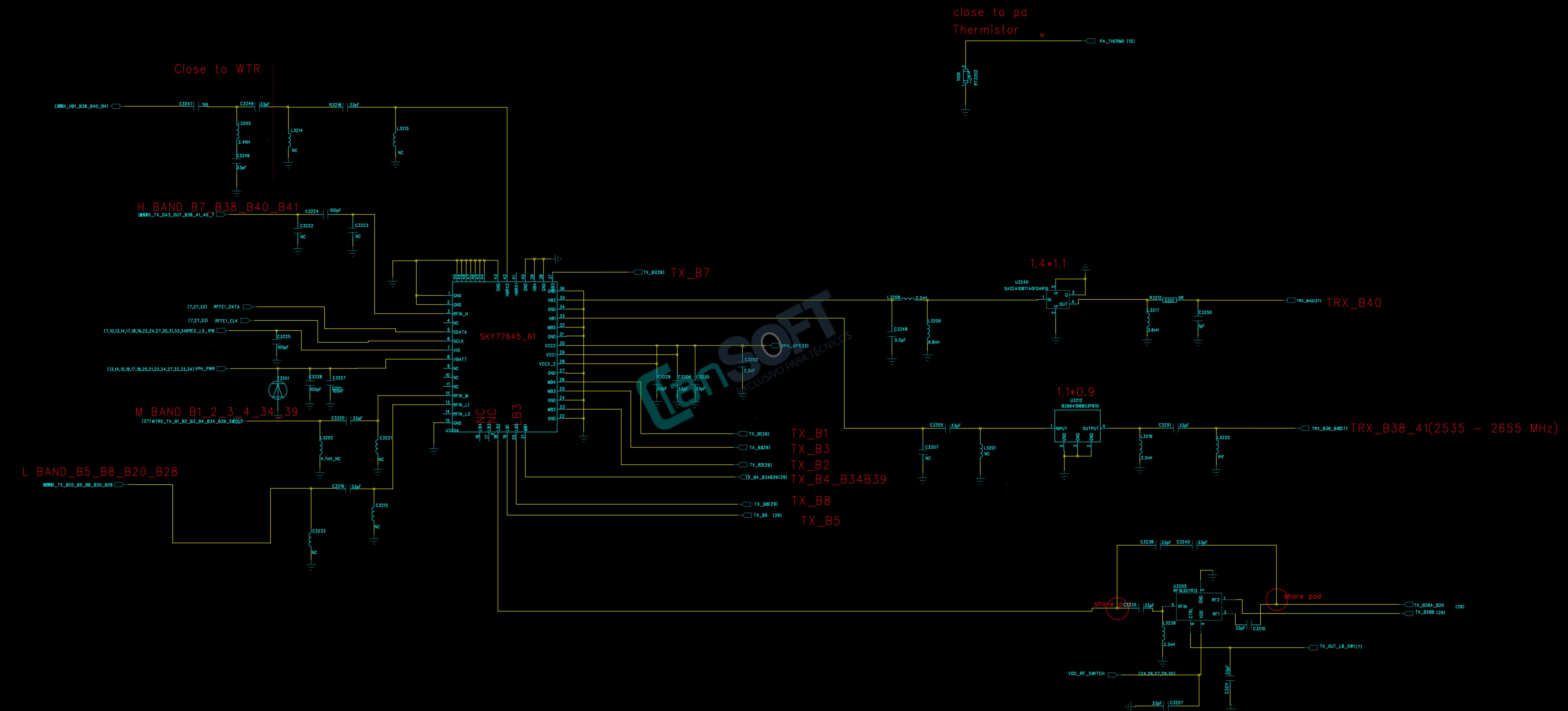








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