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Lumia 1320 Service Schematic and Placement Manual

RM-996 V1.0

Directory

- Schematics - Main board P3
- Schematics - Sub board P40
- Placements - Main board P45
- Placements - Sub board P53
- Key Components P57

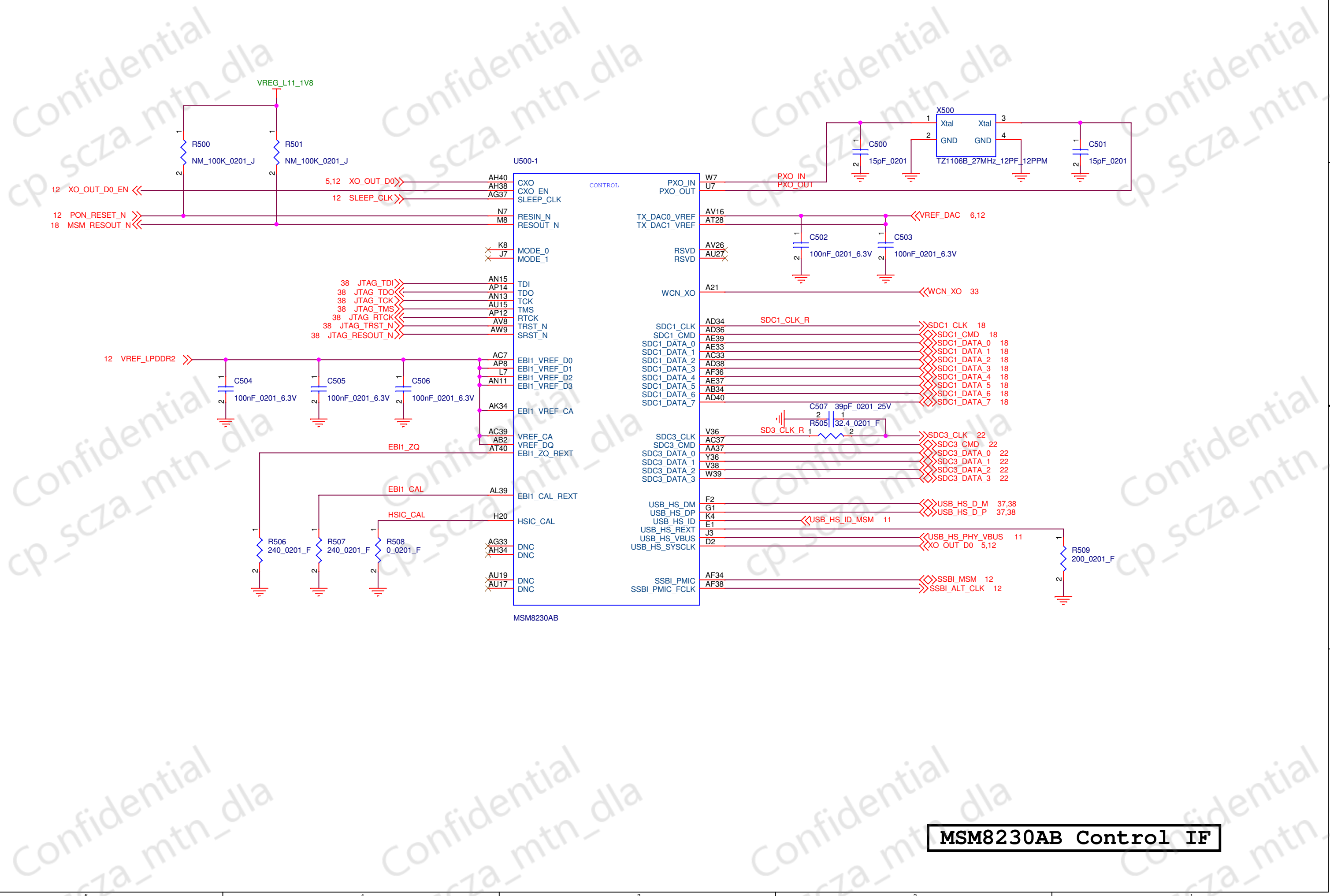
Schematics - Main board

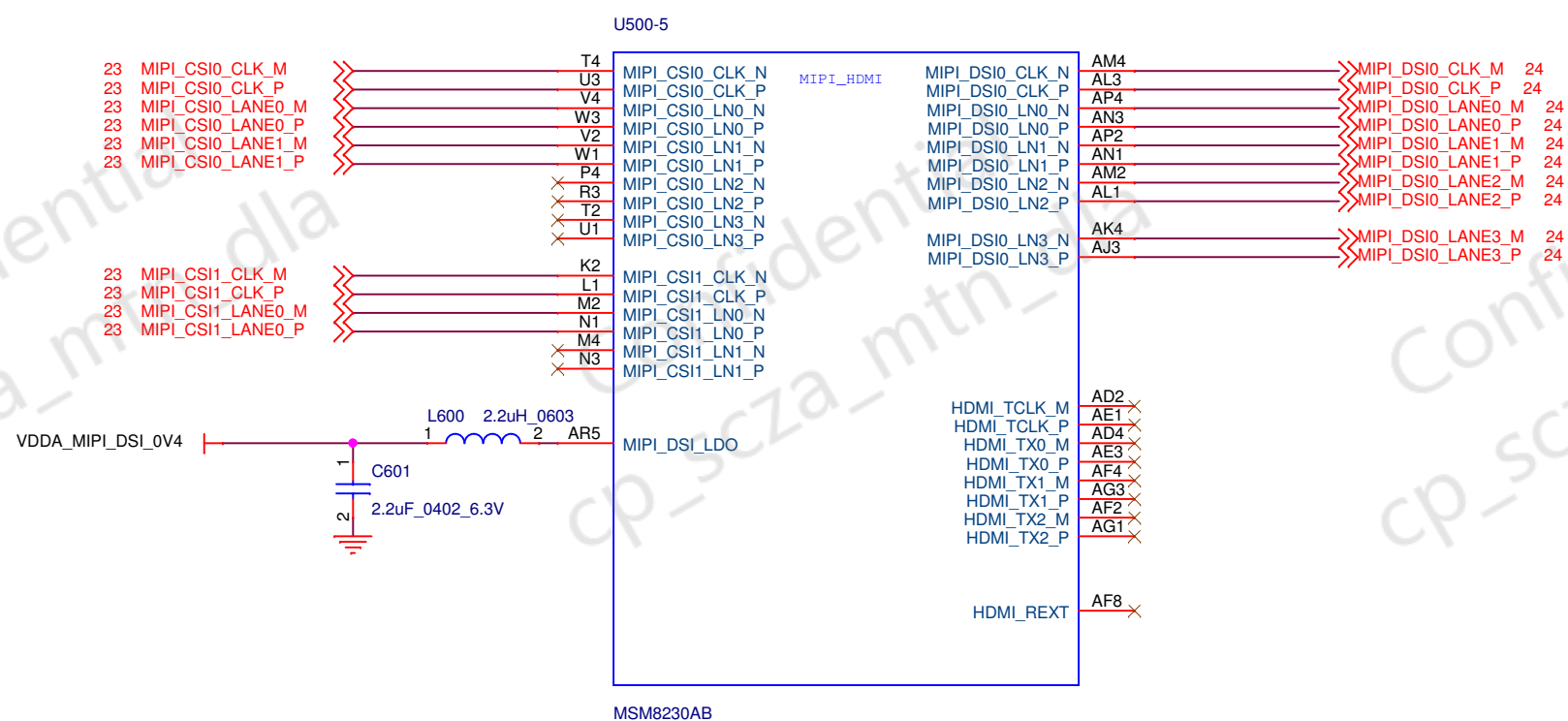
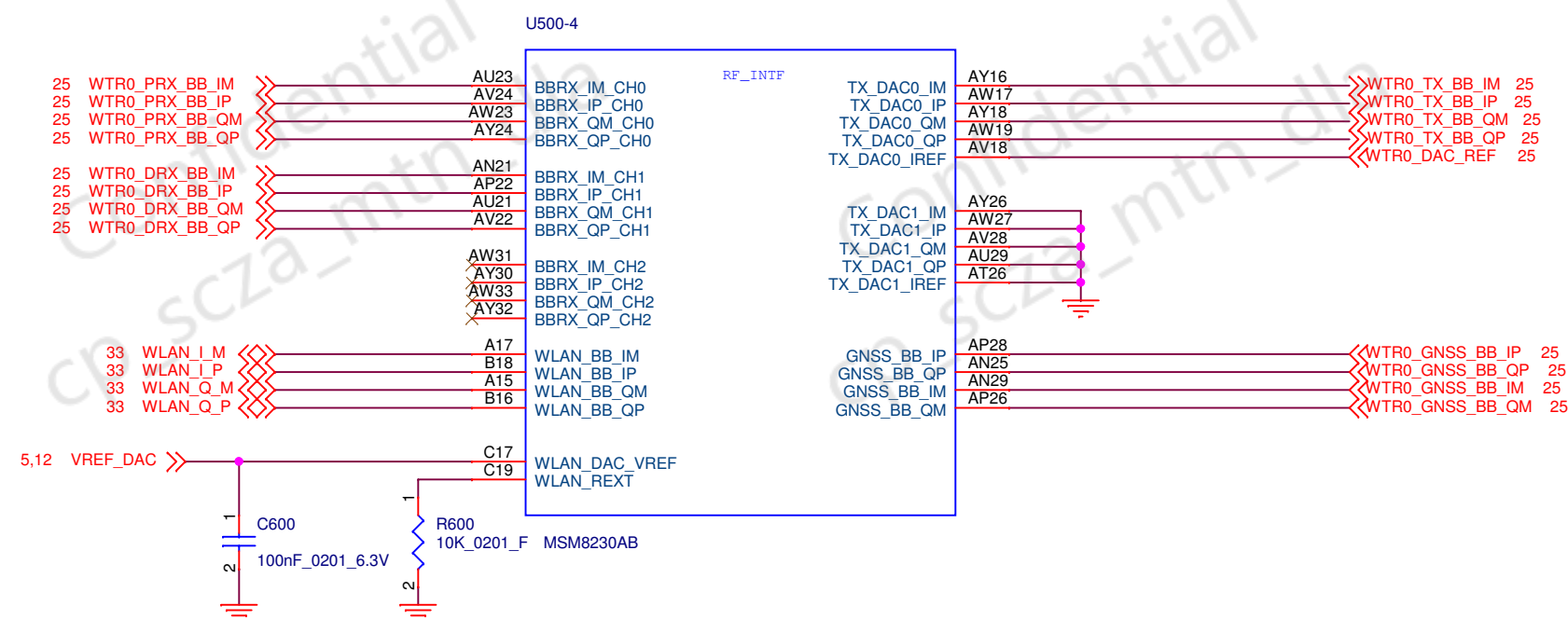
Service Schematics Main Board

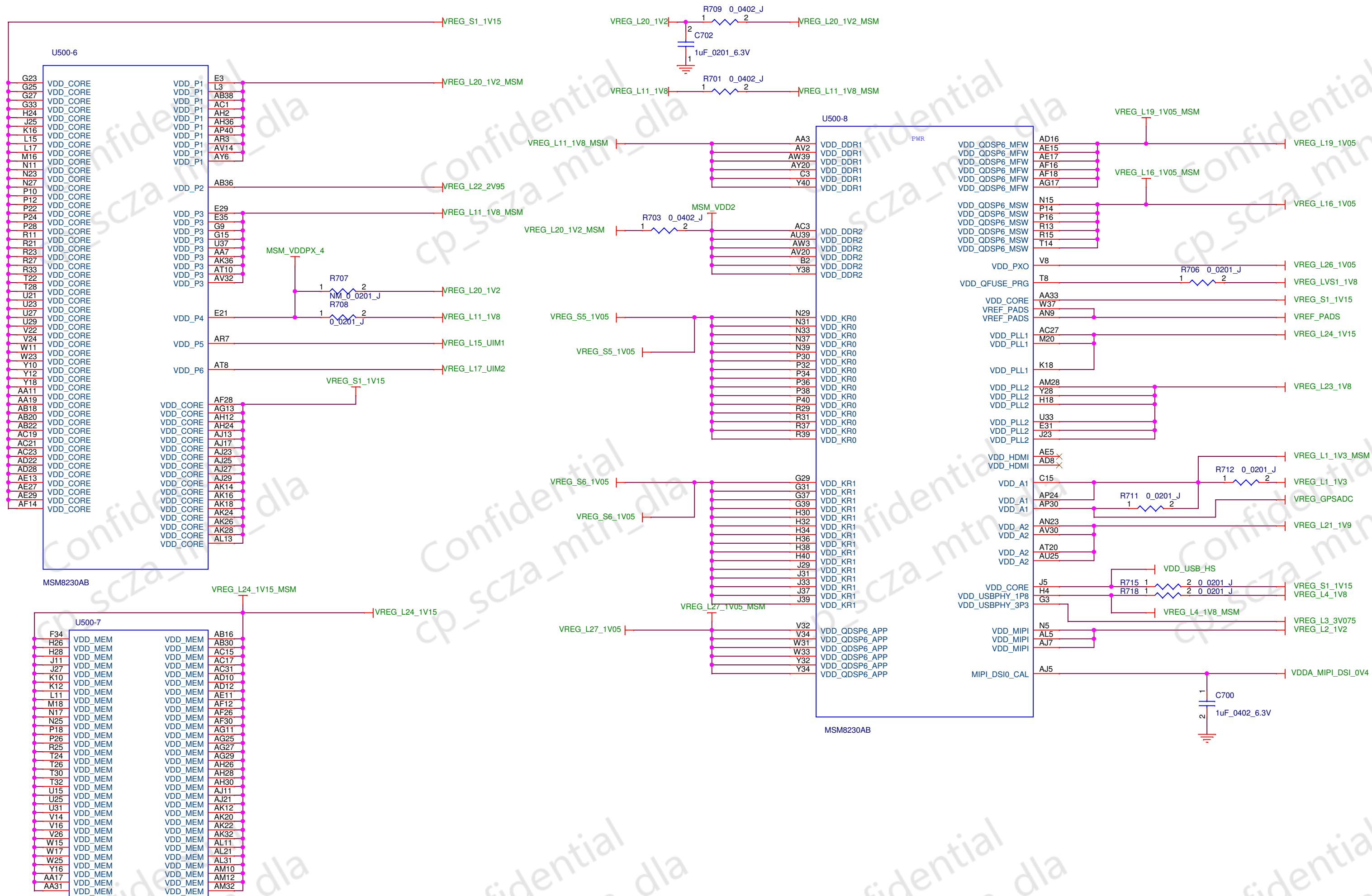
RM-996

Table of Contents

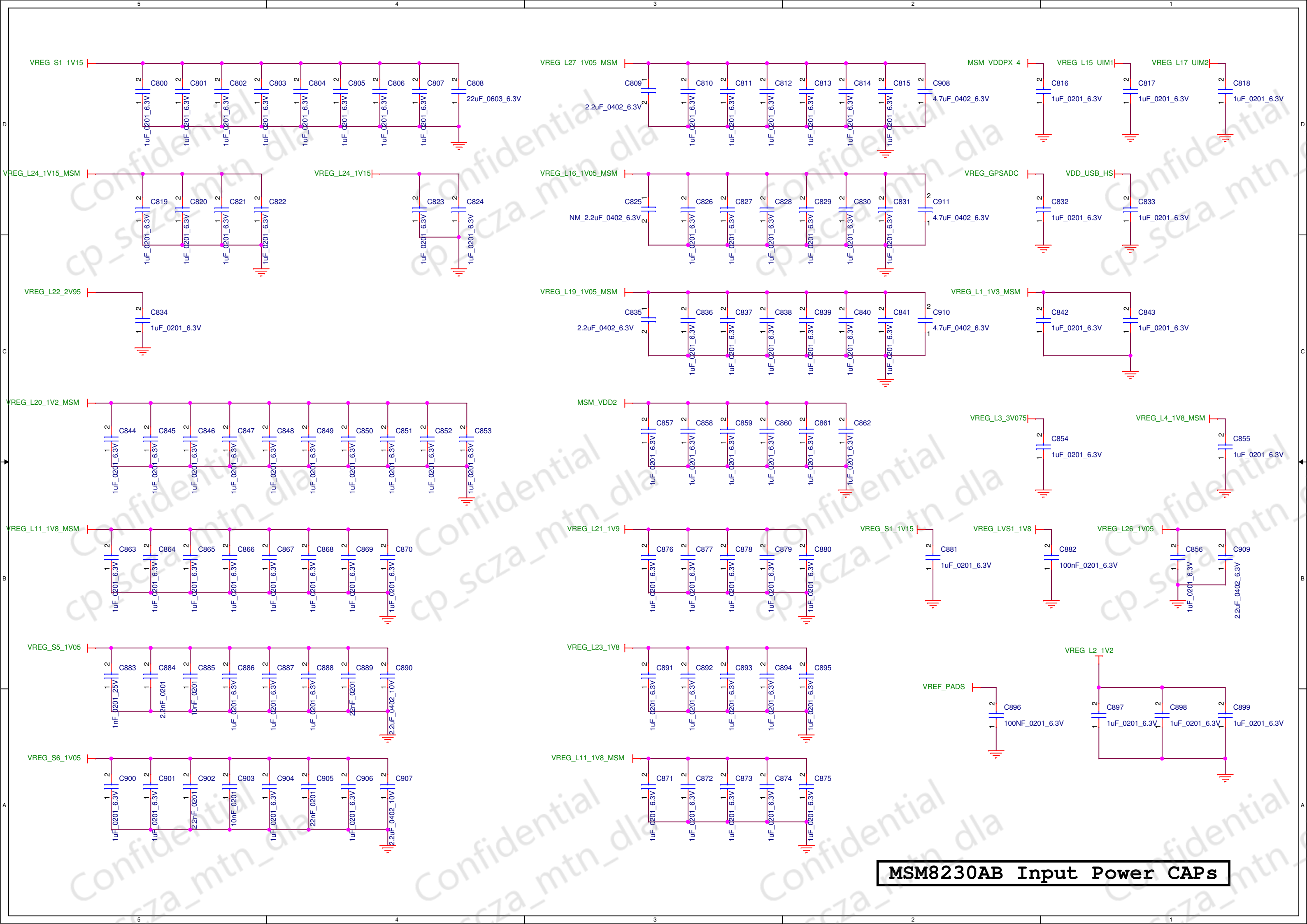
- | | |
|--|-------------------------------------|
| 1. Baseband - 1 (MSM8930AB Control IF) | 21. RF Transceiver (WTR1605L) |
| 2. Baseband - 2 (MSM8930AB MIPI/RF IF) | 22. RF PA - 1 (B1, B5, GSM) |
| 3. Baseband - 3 (MSM8930AB Inport Power) | 23. RF PA - 2 (B4/B7, B2/B3) |
| 4. Baseband - 4 (MSM8930AB Input Power CAPs) | 24. RF PA - 3 (B8, B17/20) |
| 5. Baseband - 5 (MSM8930AB GNDs) | 25. RF PA - 4 (SMPS) |
| 6. GPIOs (MSM8930AB) | 26. RF Front End (ANT - 1) |
| 7. PMIC - 1 (PM8038 Charging/Gasgauge) | 27. RF Front End (ANT - 2) |
| 8. PMIC - 2 (PM8038 Clocks/GPIOs/MPPs) | 28. BT/Wifi/FM - 1 |
| 9. PMIC - 3 (PM8038 Buck VREGs) | 29. BT/Wifi/FM - 2 |
| 10. PMIC - 4 (PM8038 LDO VREGs) | 30. GPS |
| 11. Touch | 31. Accelerometer Sensor/P/L Sensor |
| 12. Flash LED | 32. To SUB Board BTB |
| 13. Memory - 1 (POP LPDDR2) | 33. Debug Conn / TPs |
| 14. Memory - 2 (eMMC) | 34. Mechanical Parts Template |
| 15. Audio - 1 (Microphone/Receiver) | |
| 16. Audio - 2 (Headset) | |
| 17. Audio - 3 (Audio Codec WCD9304) | |
| 18. SIM Card/Micro SD Card | |
| 19. Camera | |
| 20. LCM | |



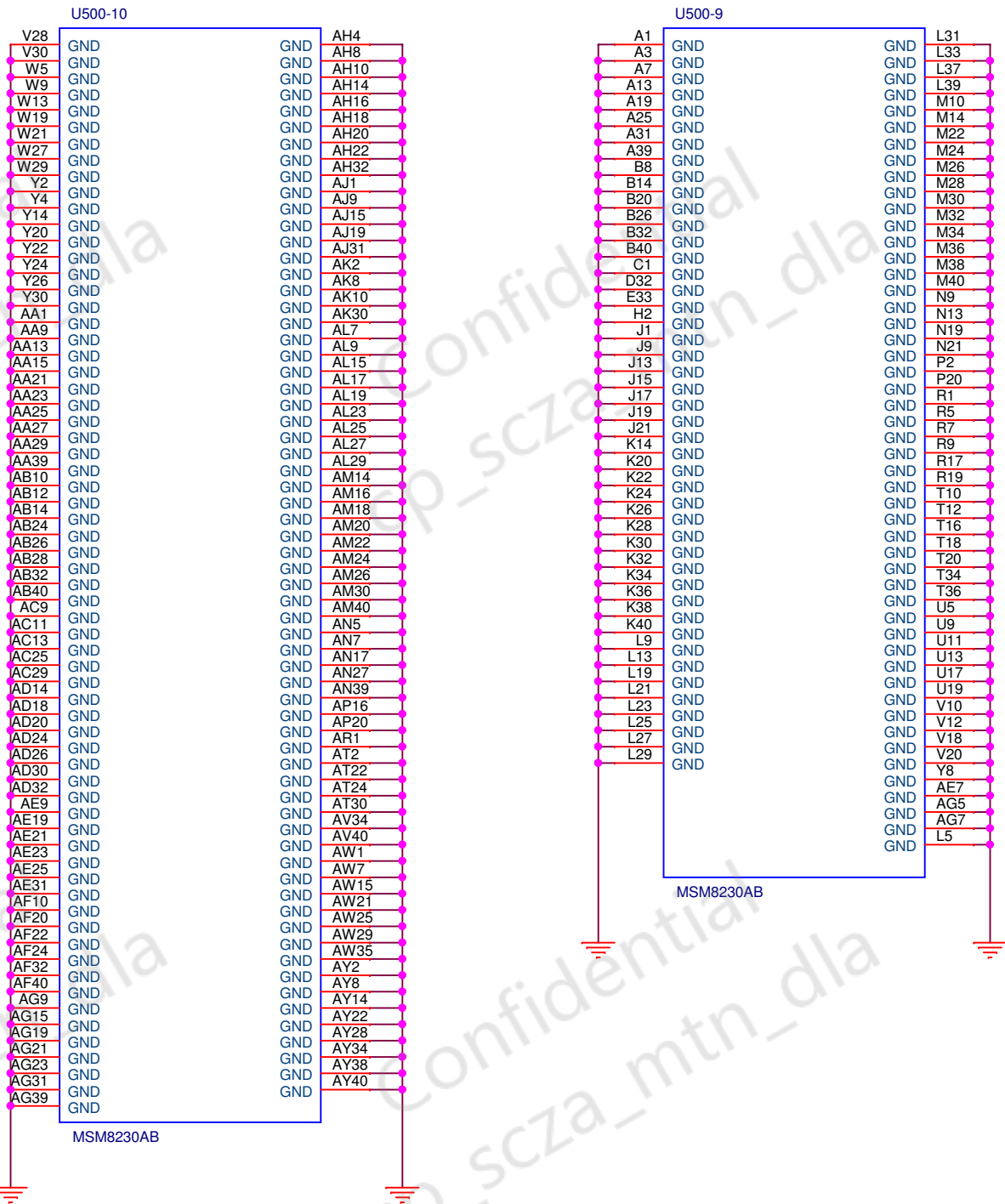


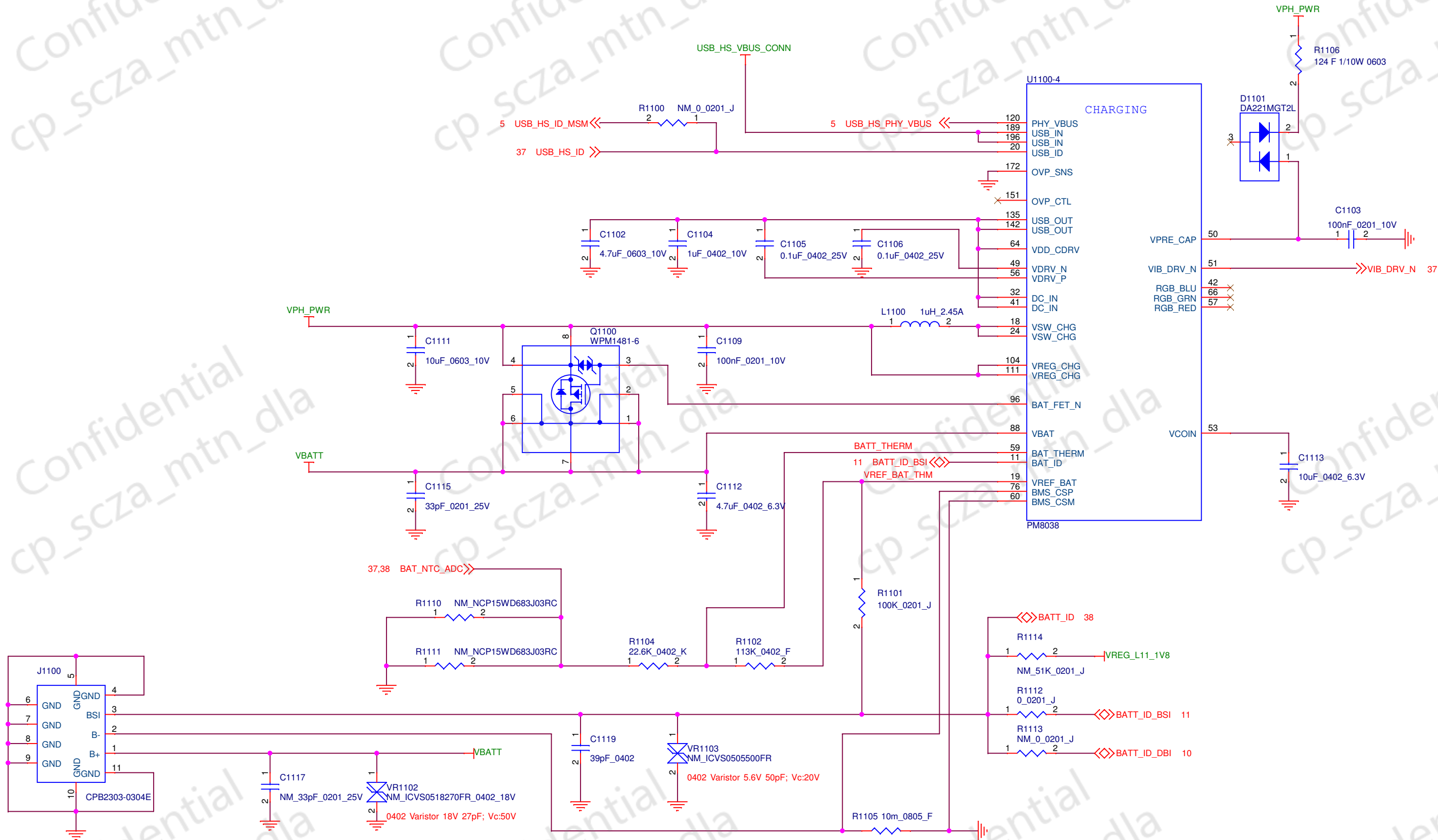


MSM8230AB Inport Power

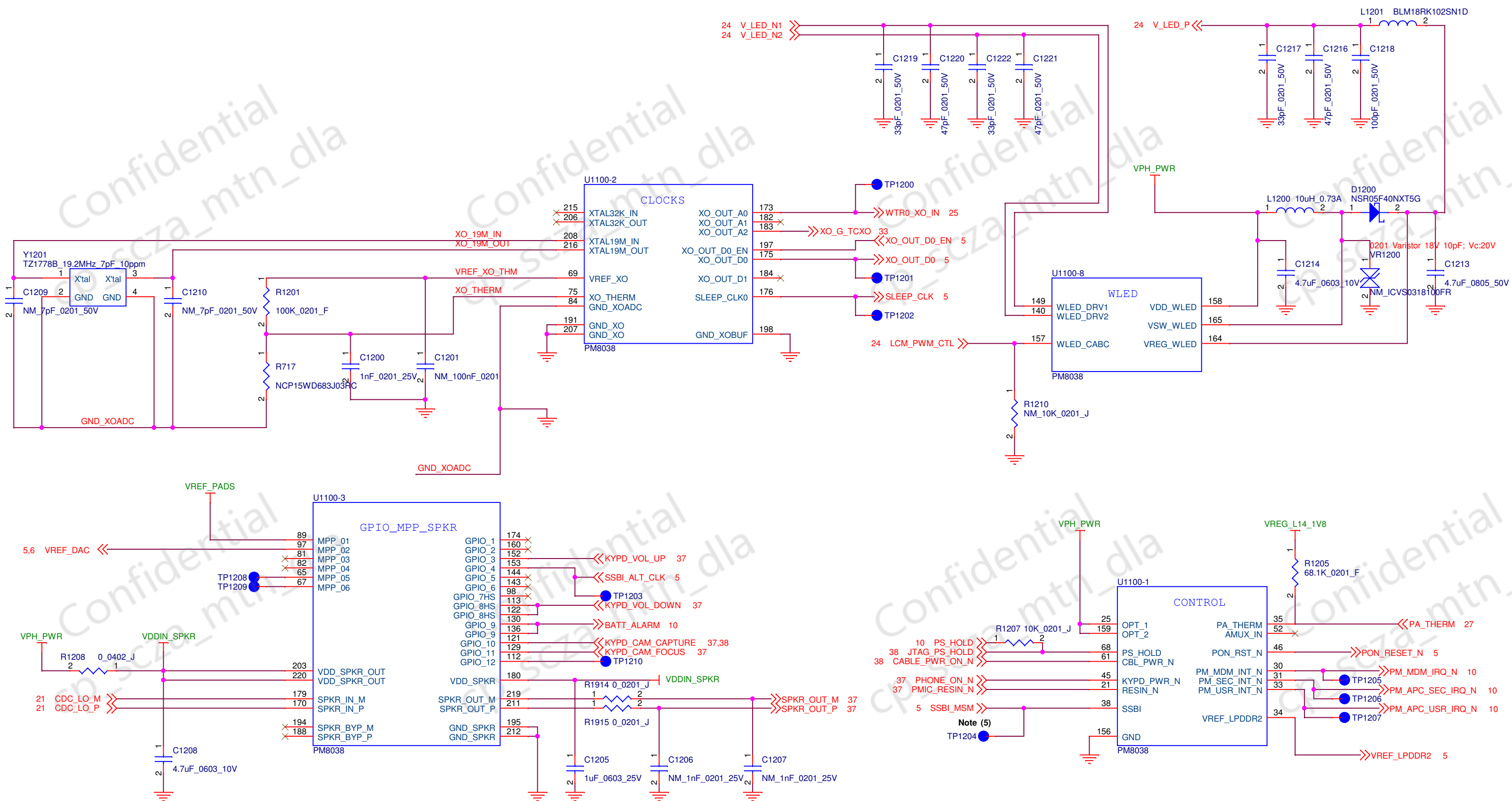


MSM8230AB Input Power CAPs





PM8038 Charging/Gasgauge



PM8038 Clocks/GPIOs/MPPs

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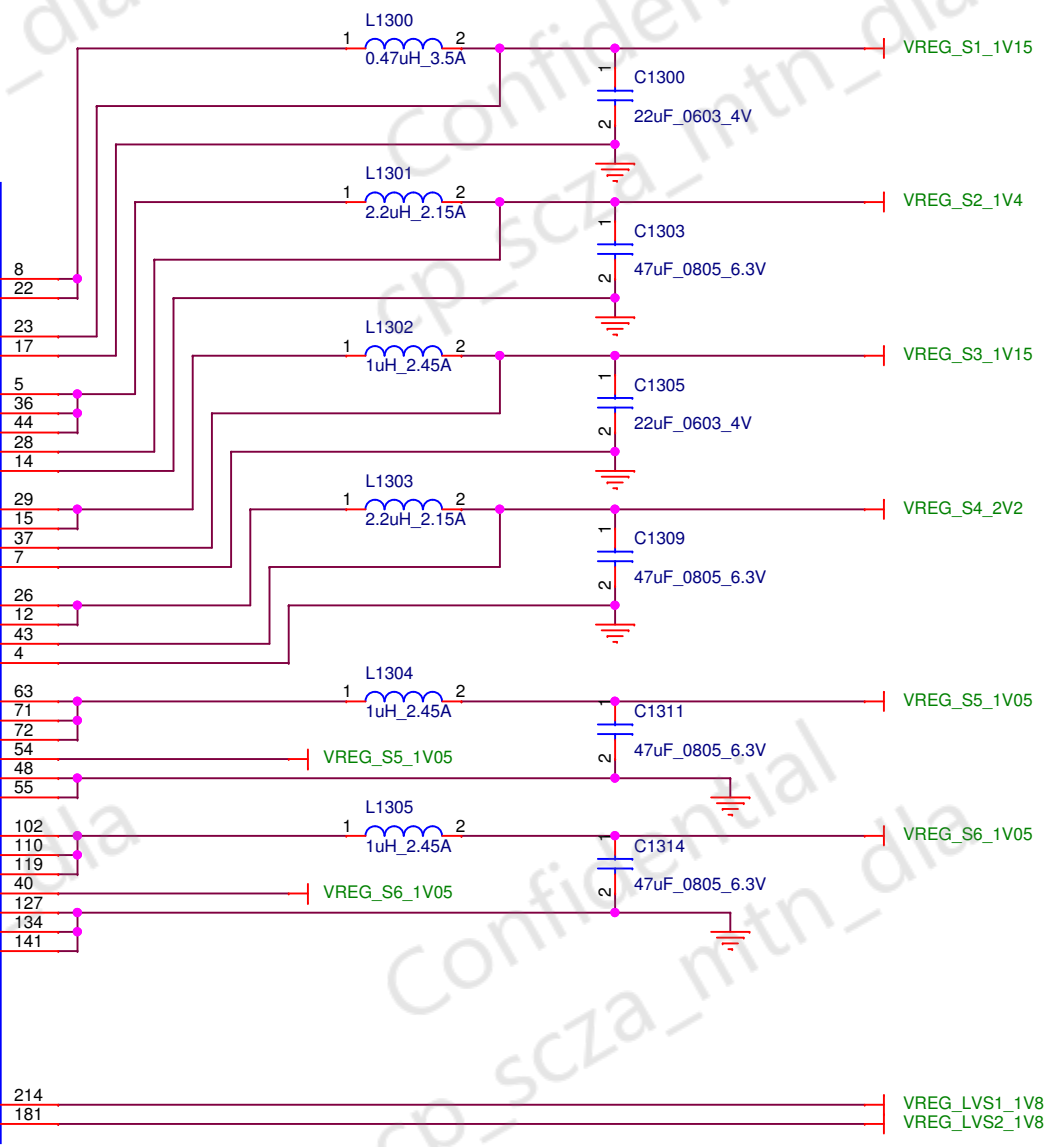
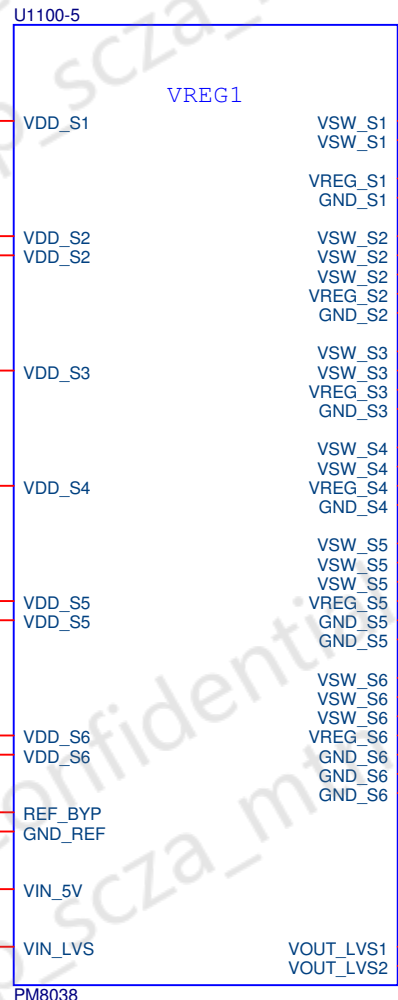
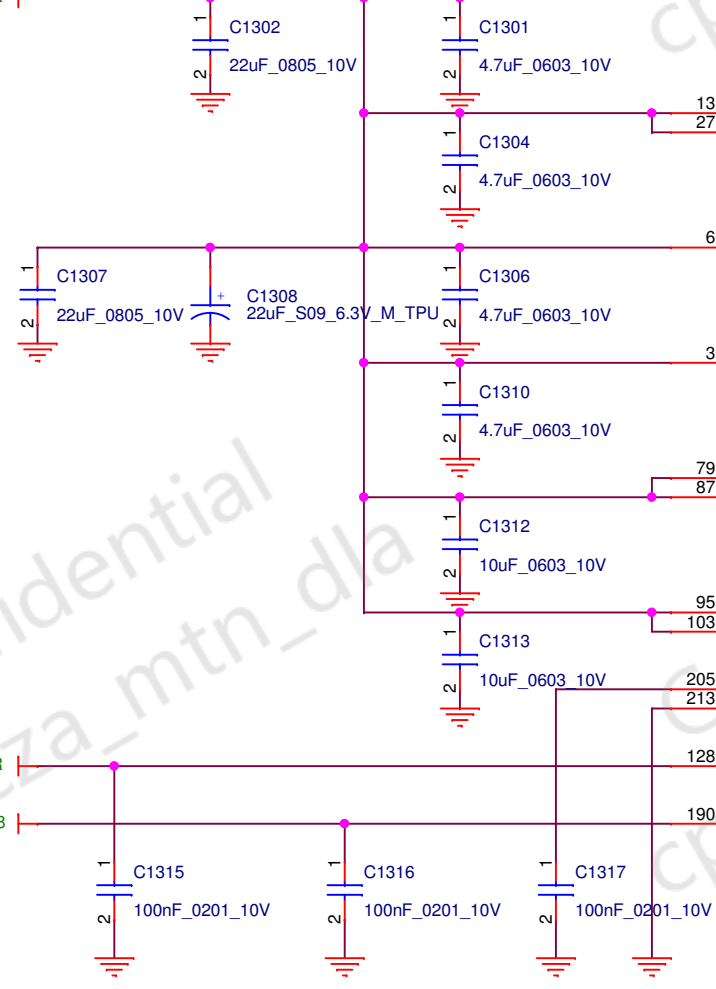
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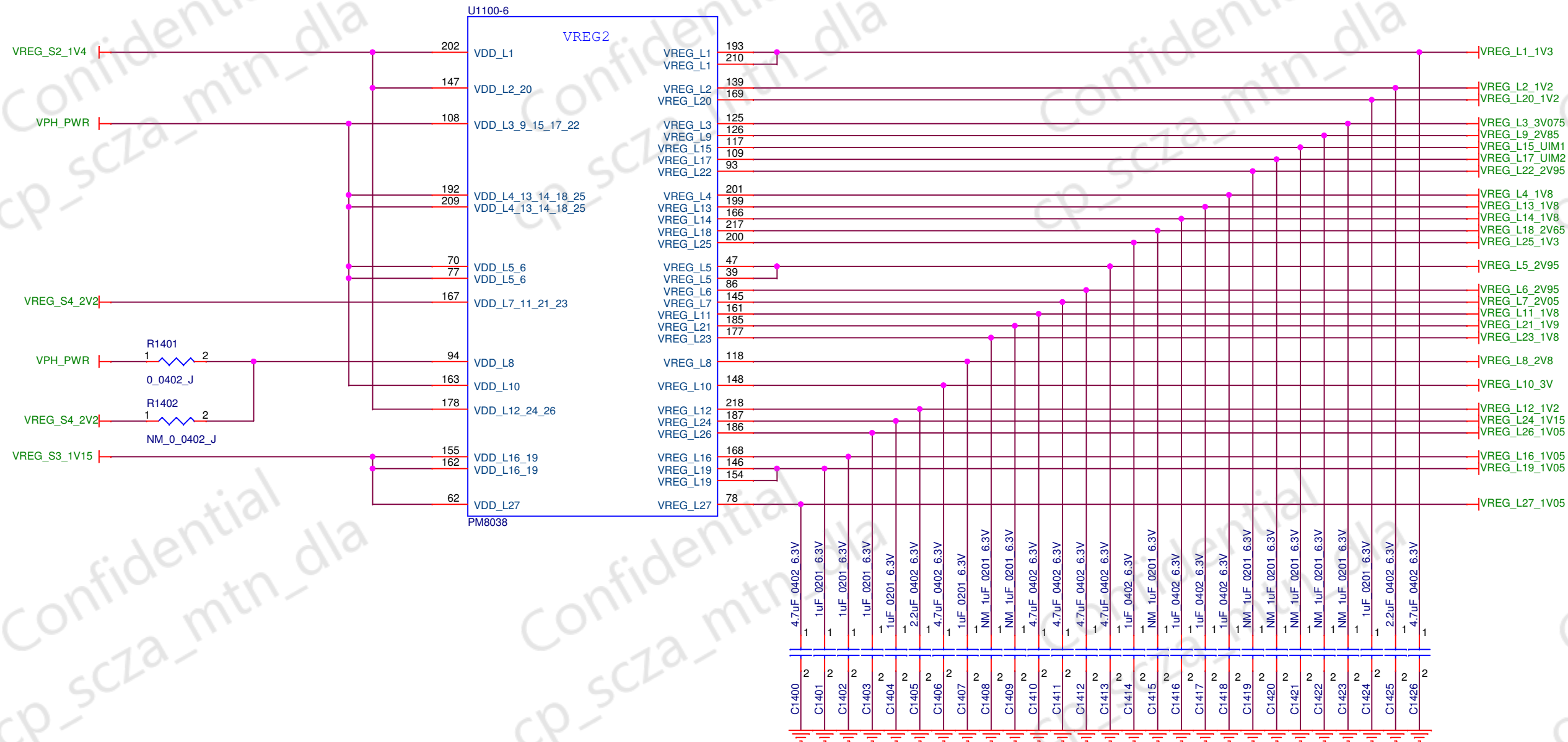
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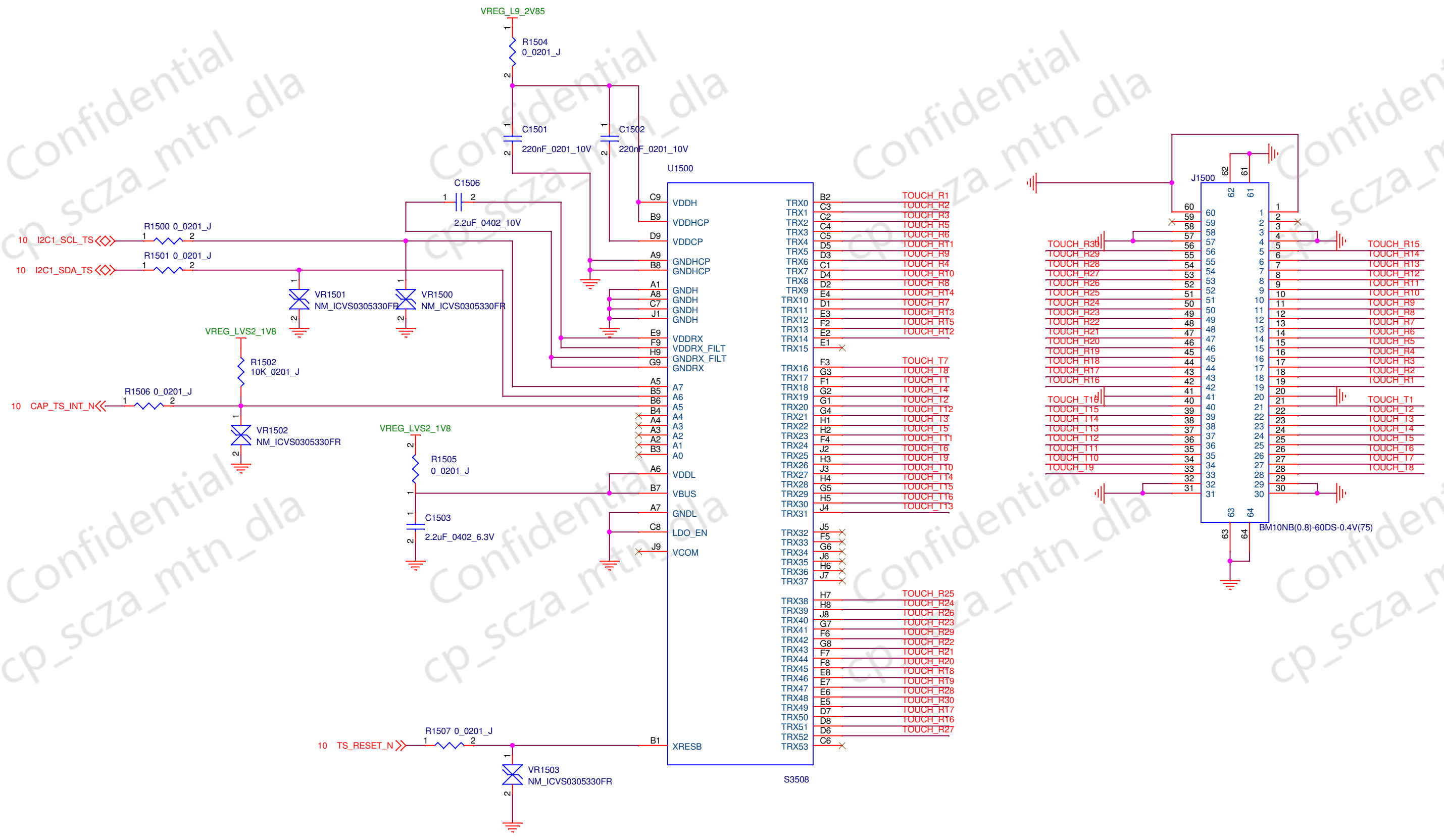
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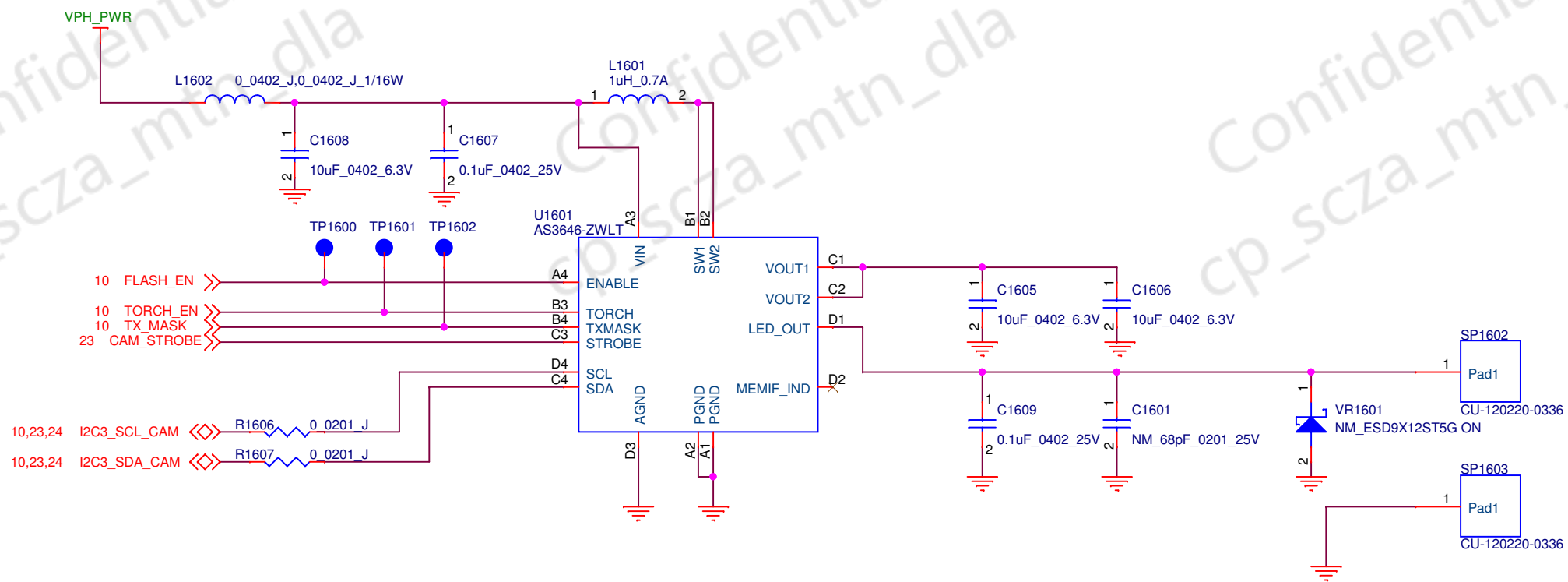
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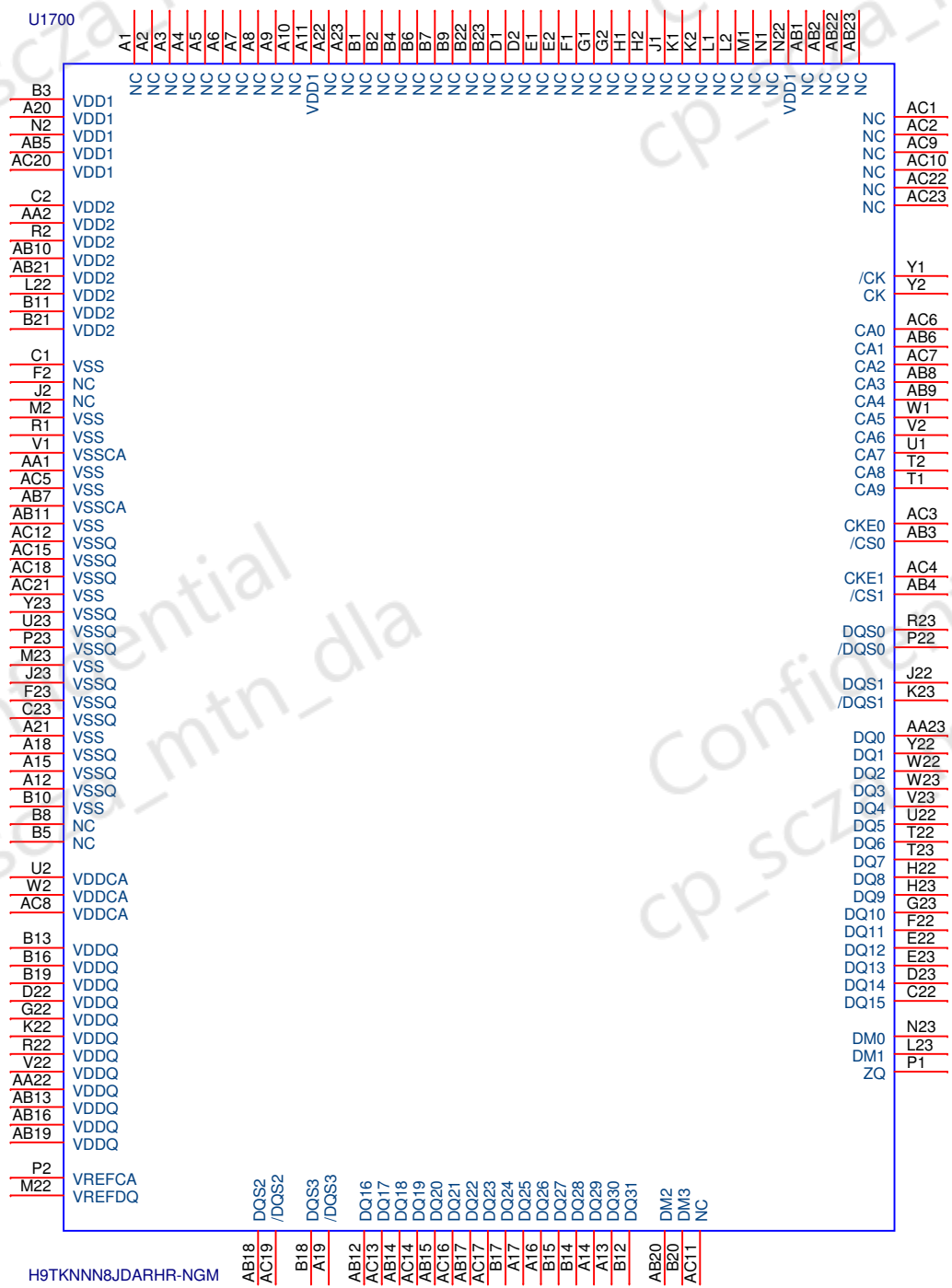


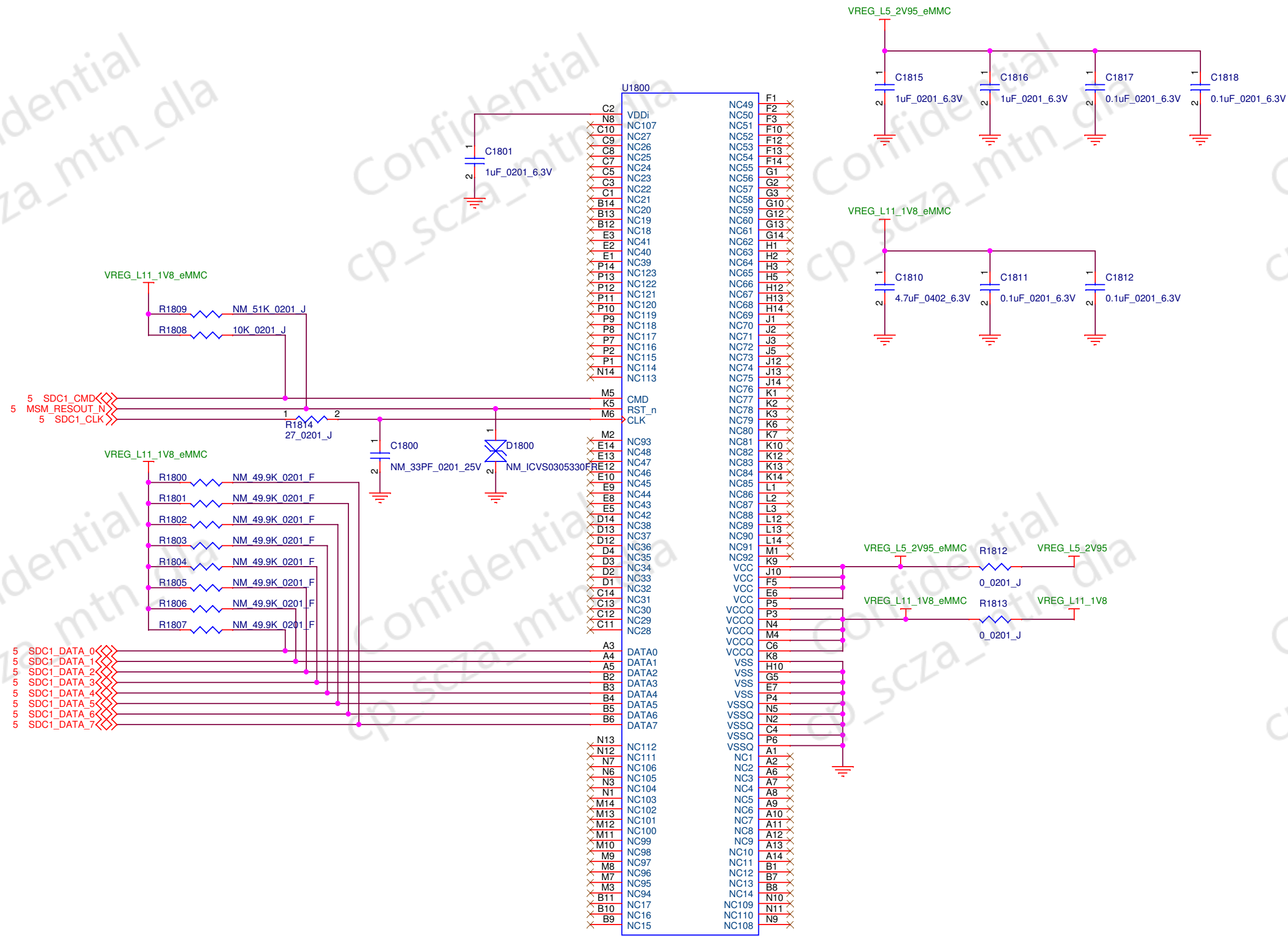
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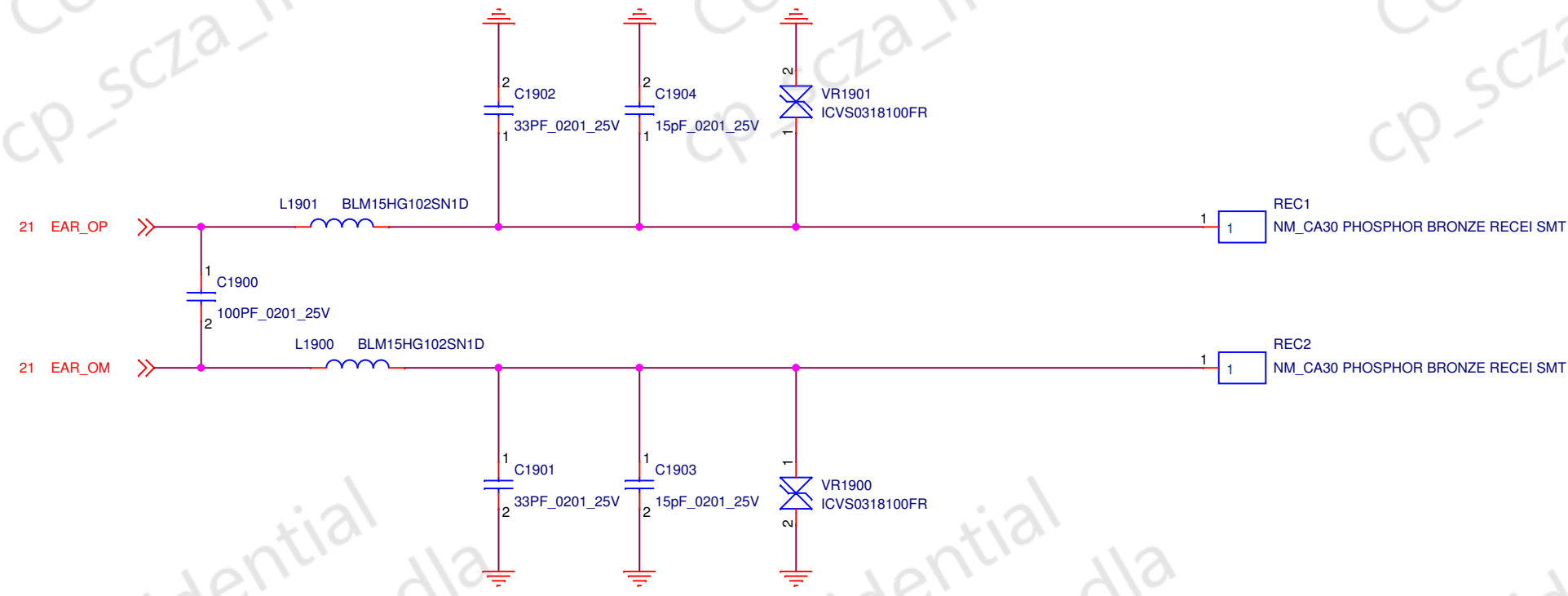


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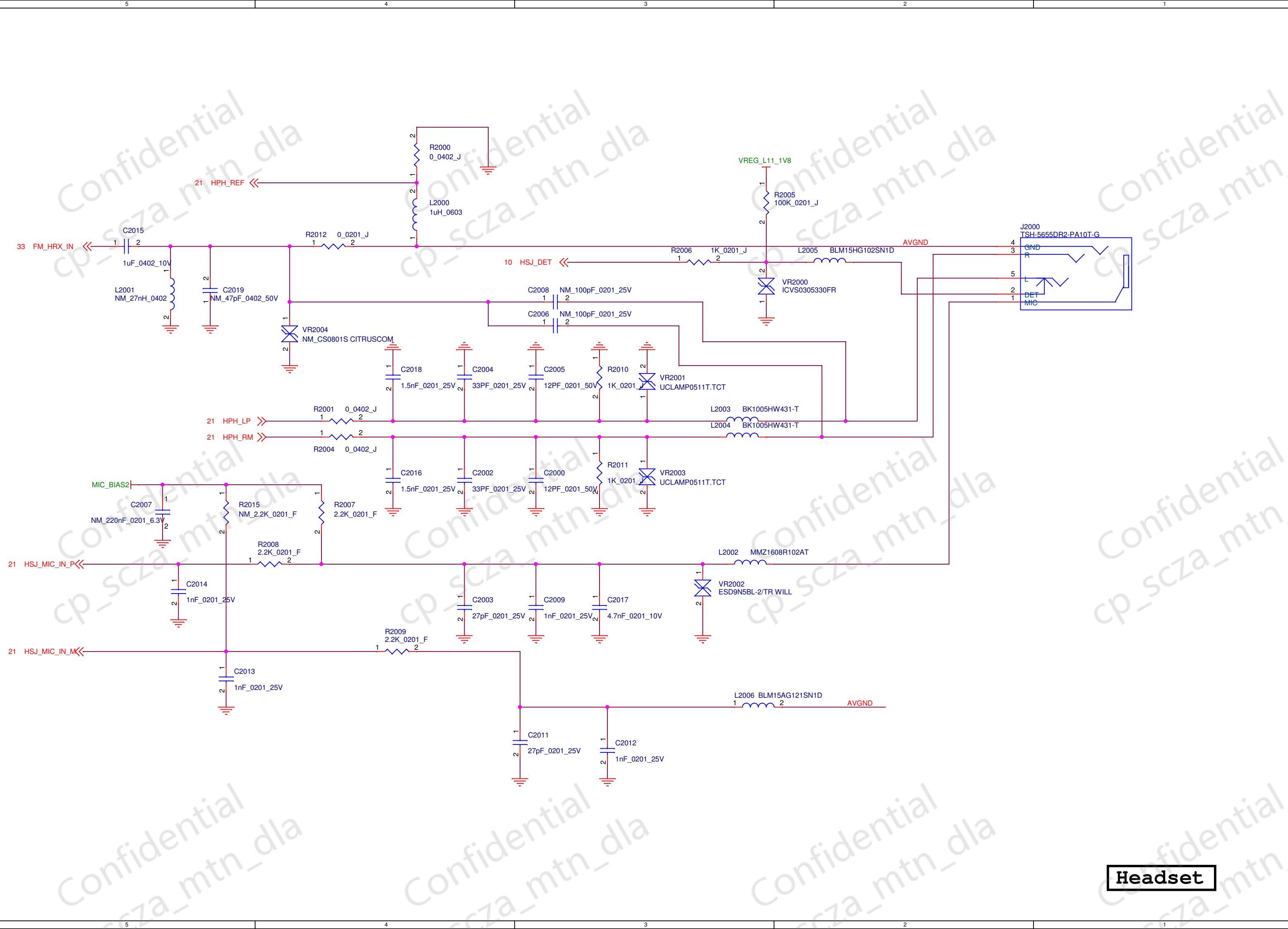




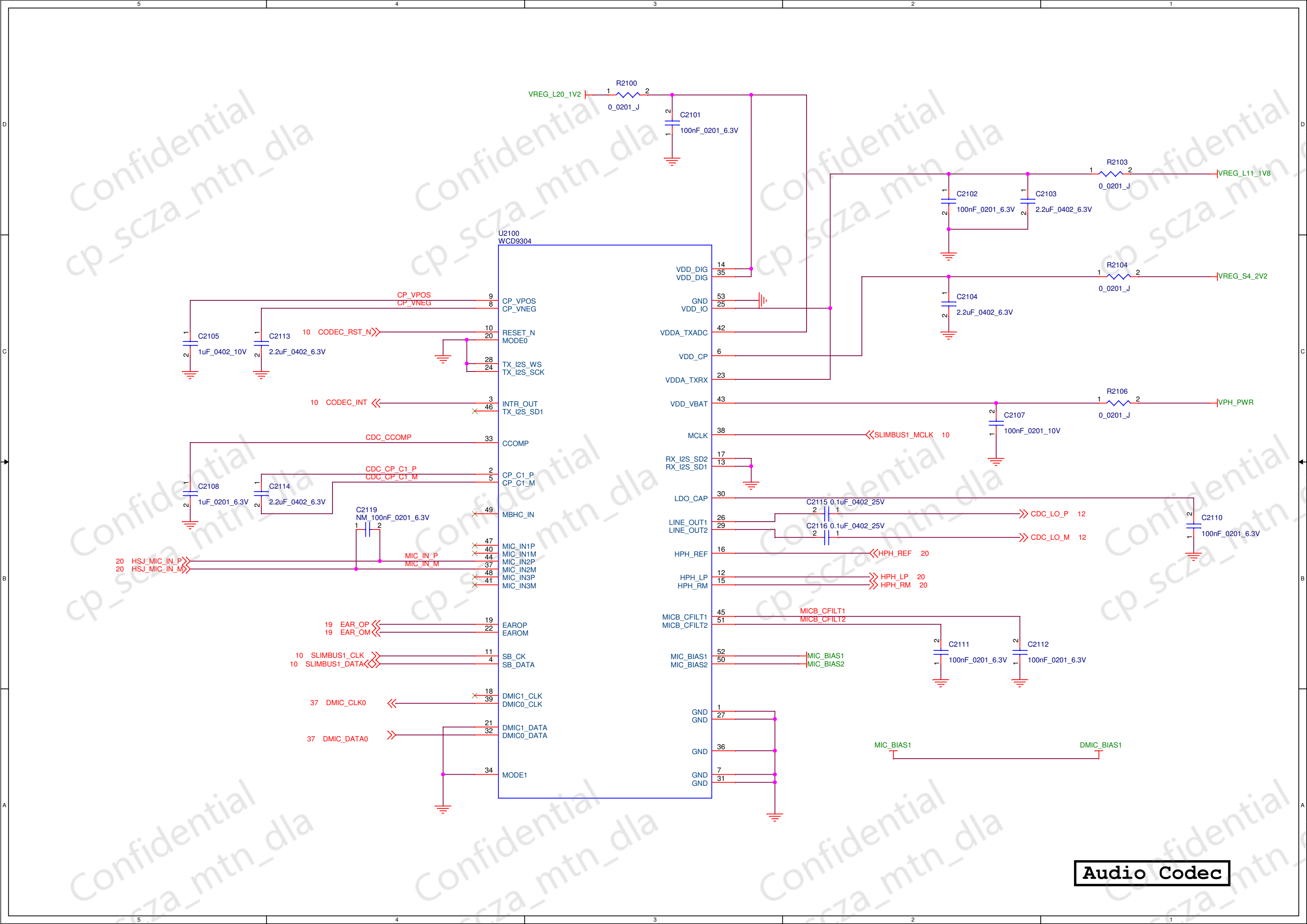


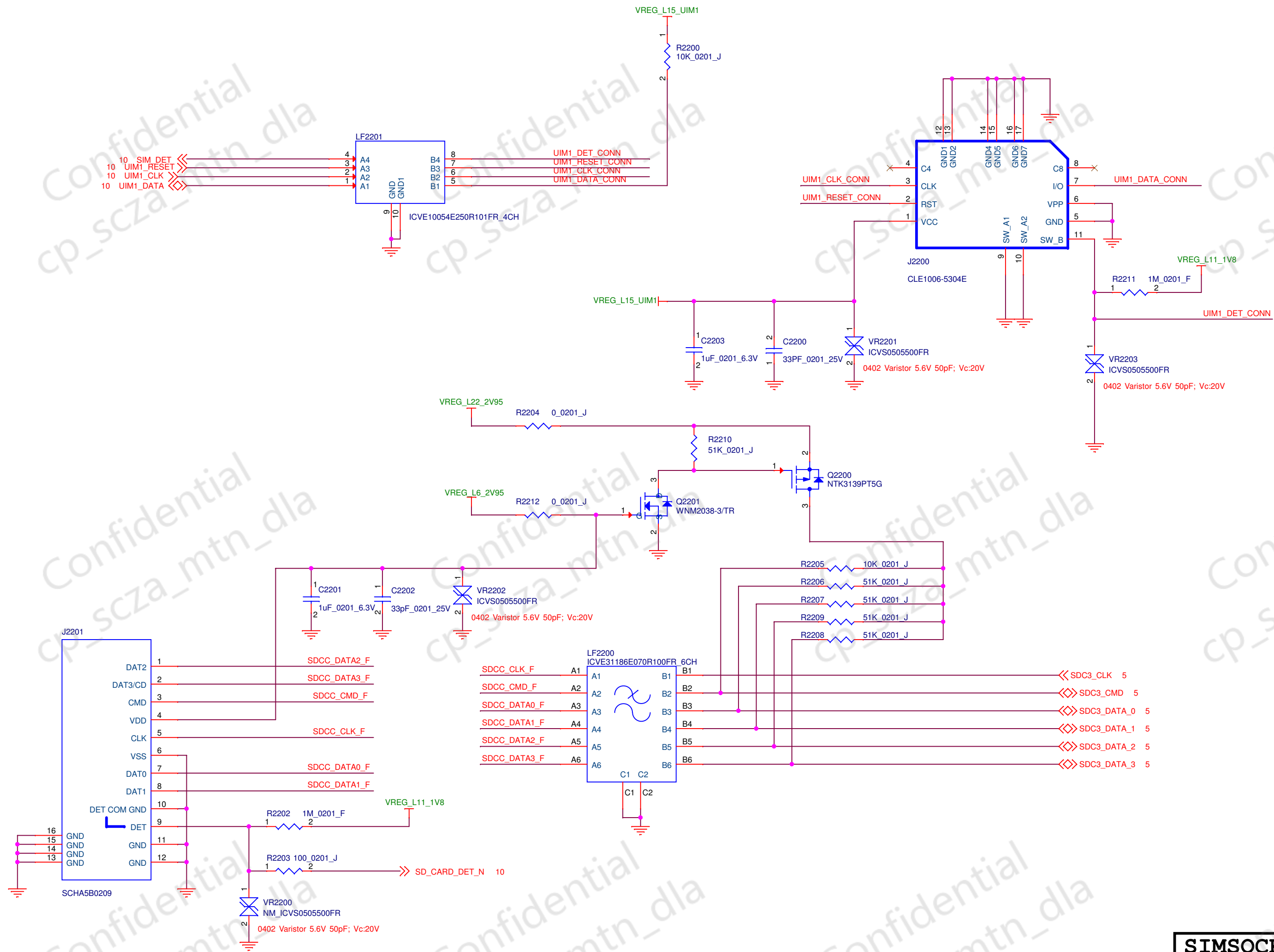


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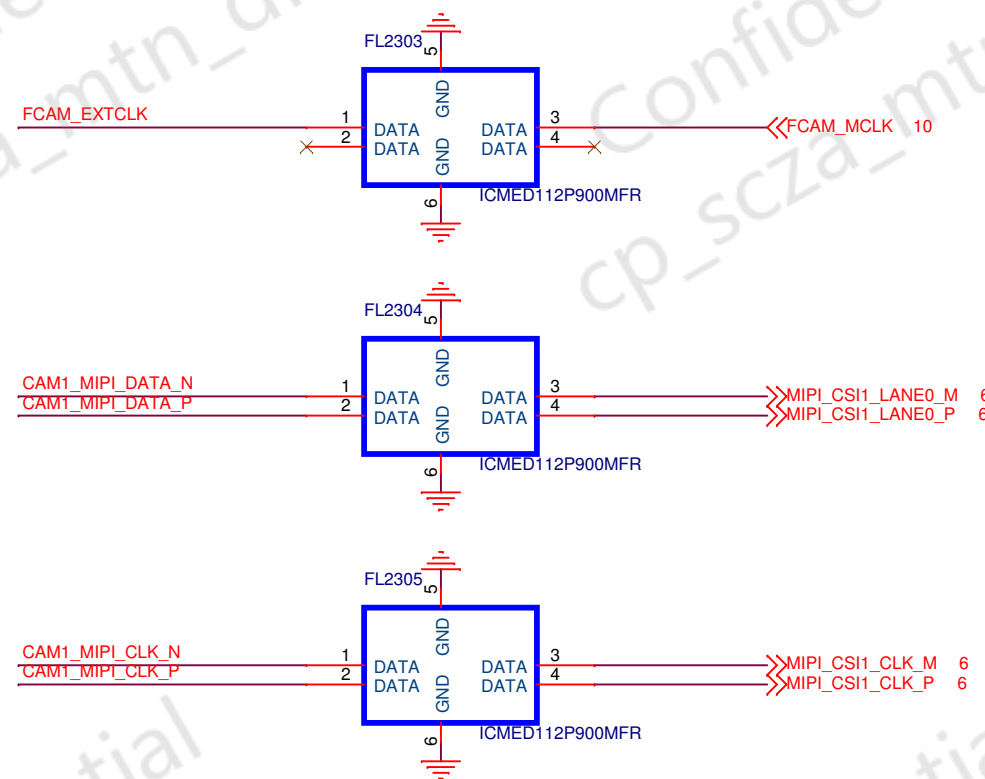
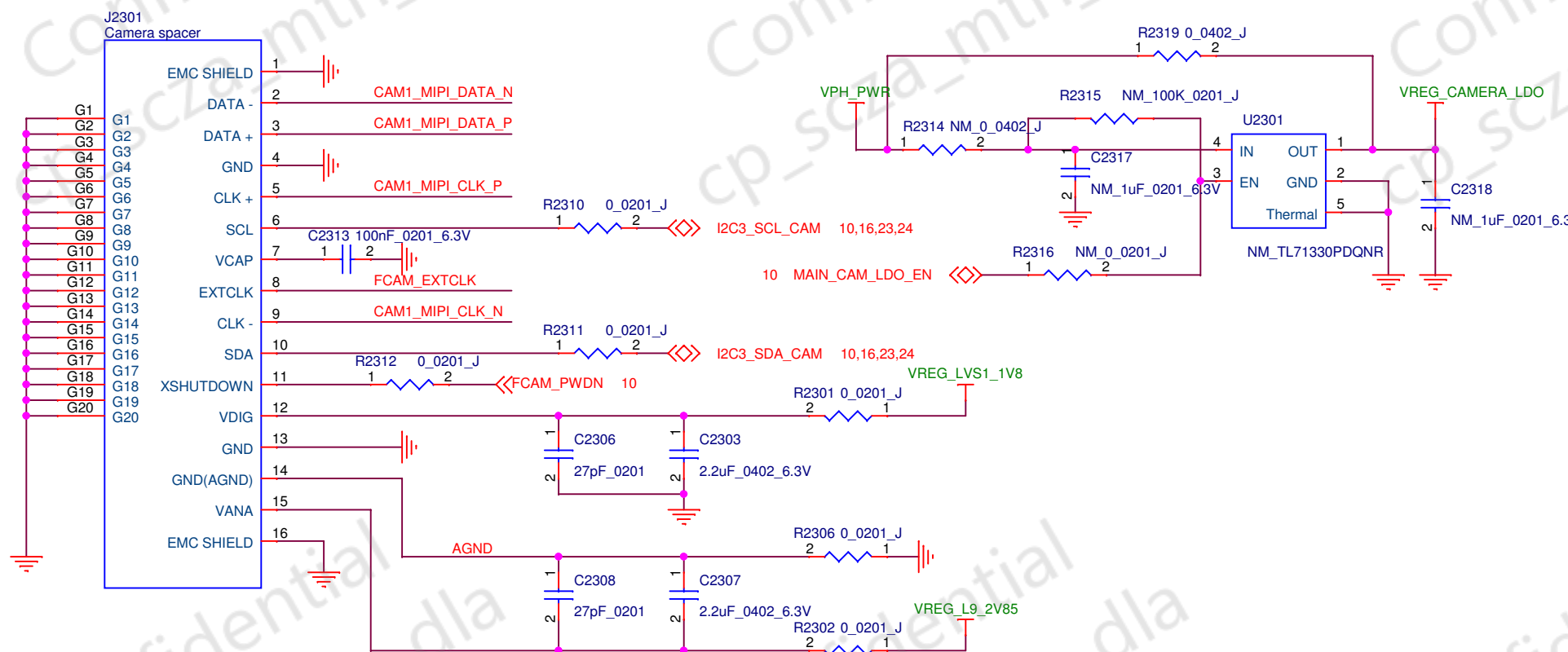
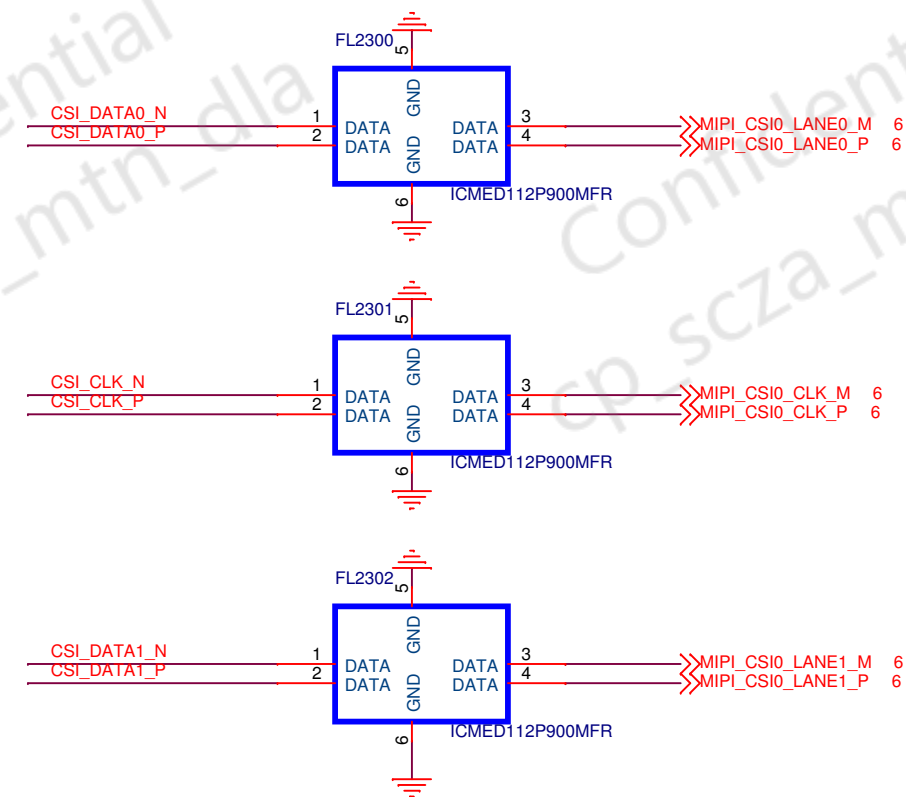
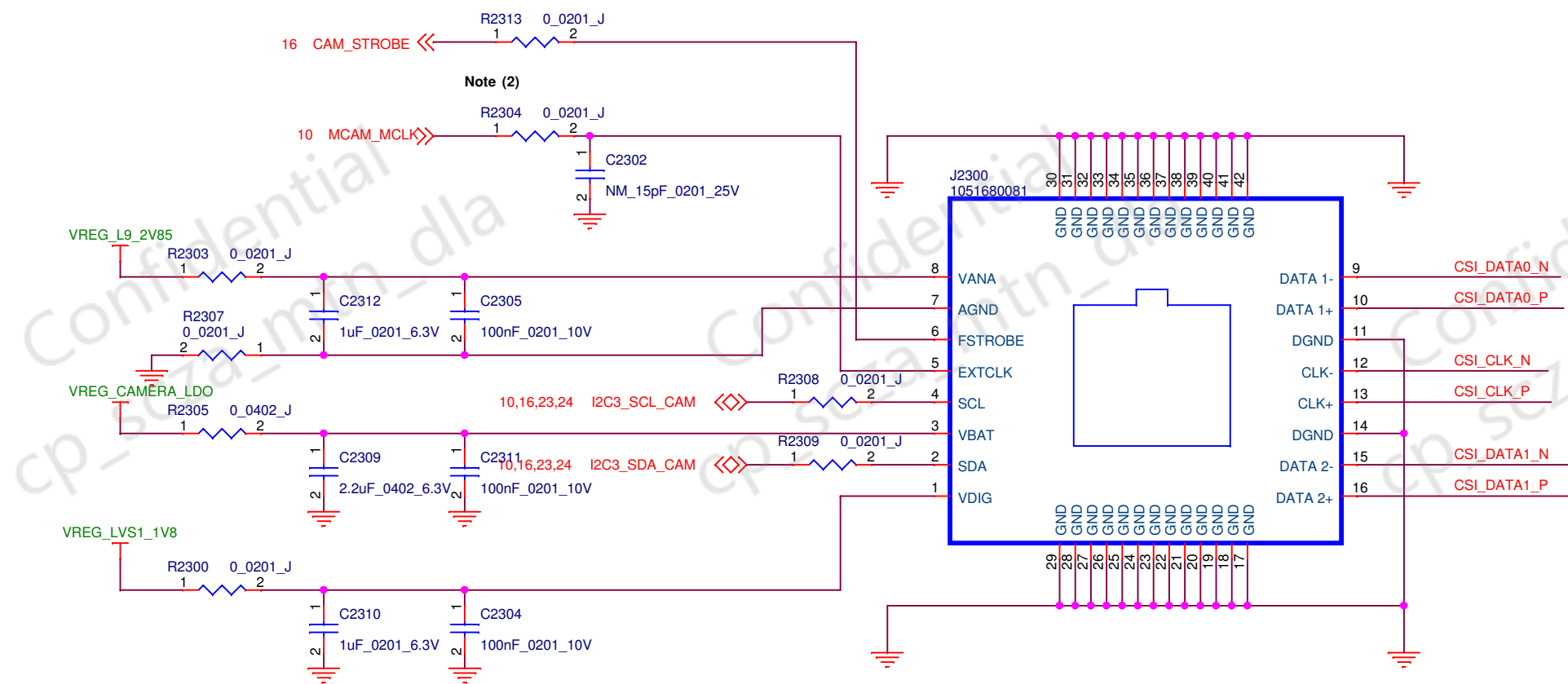


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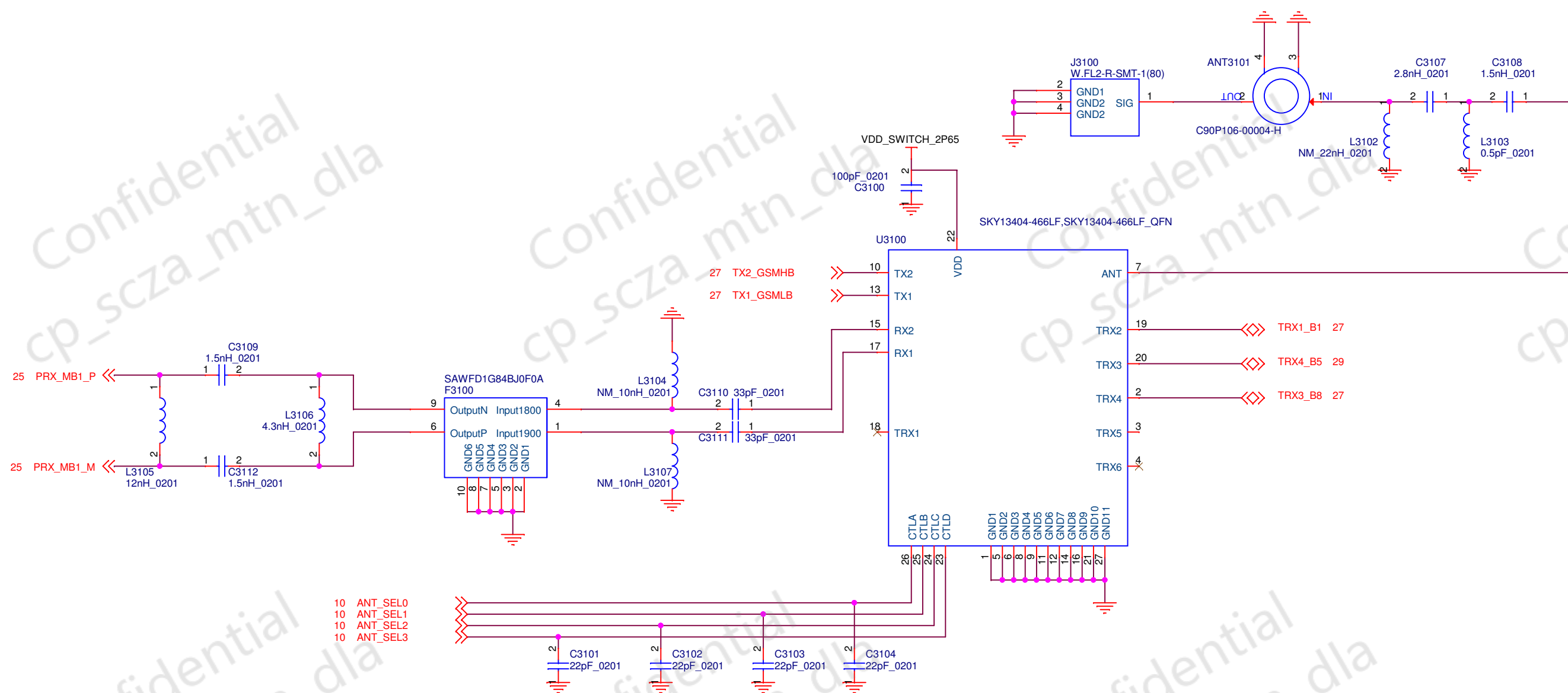




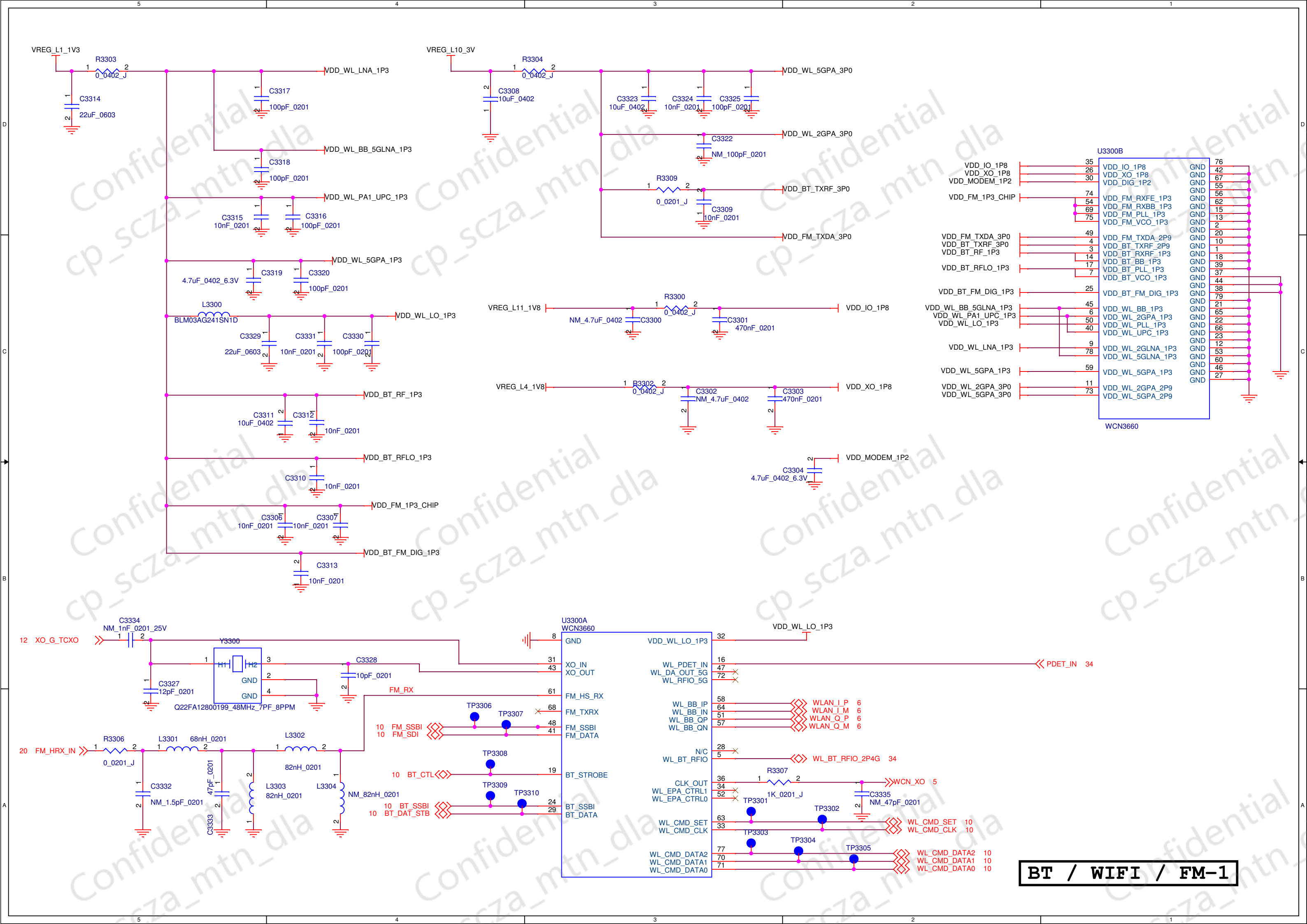
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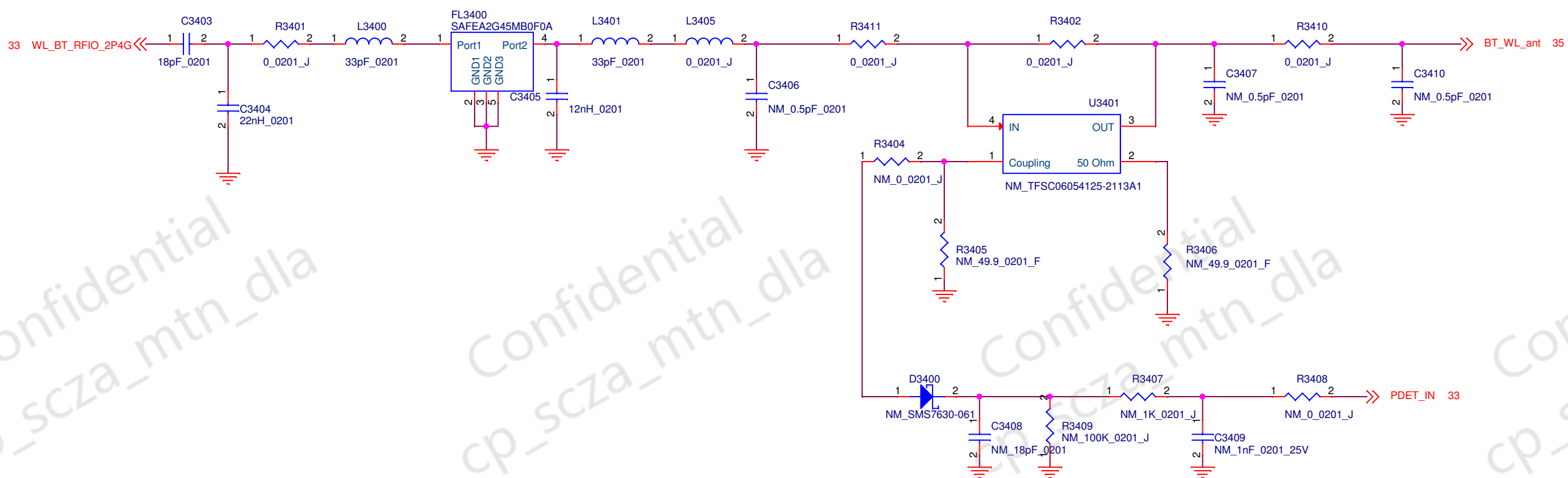


Camera



RF Front End (ANT)





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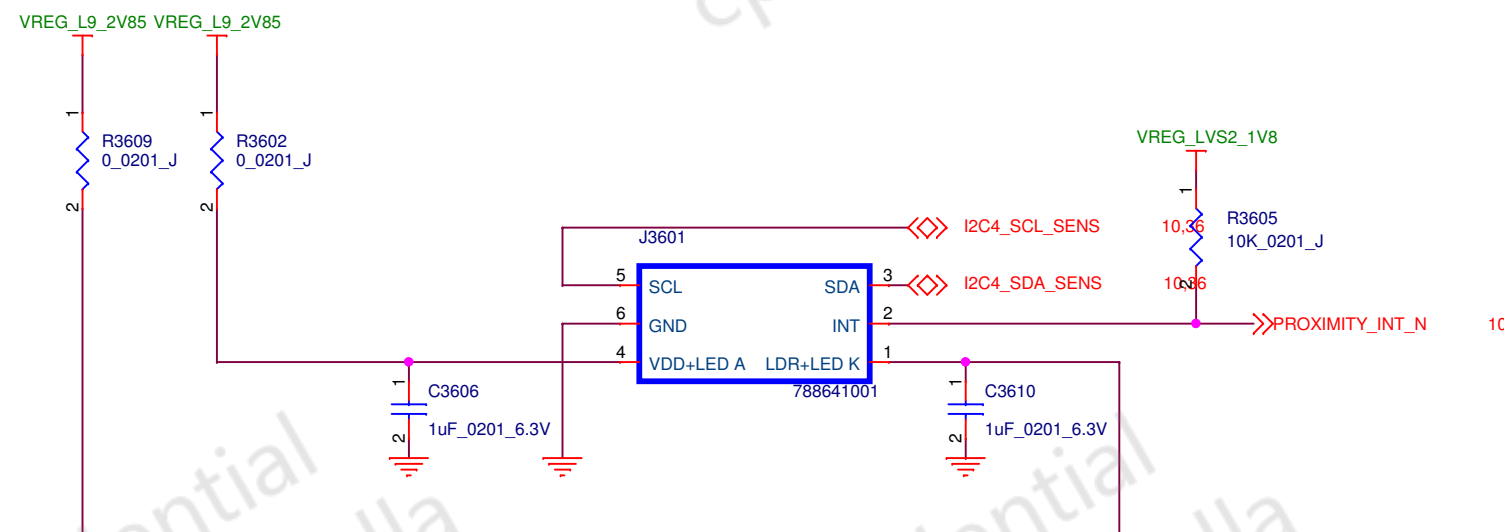
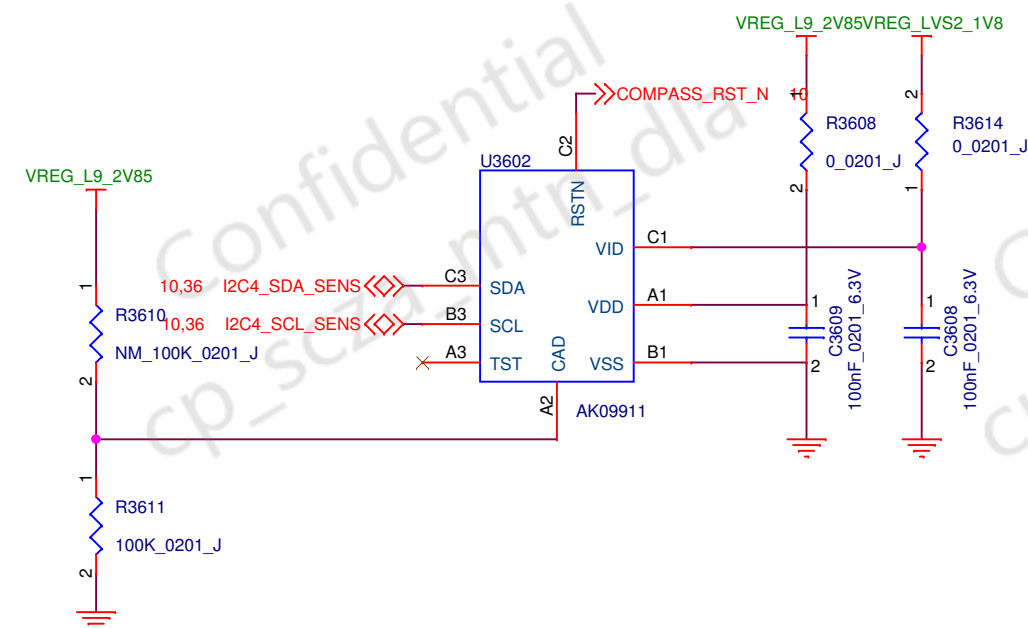
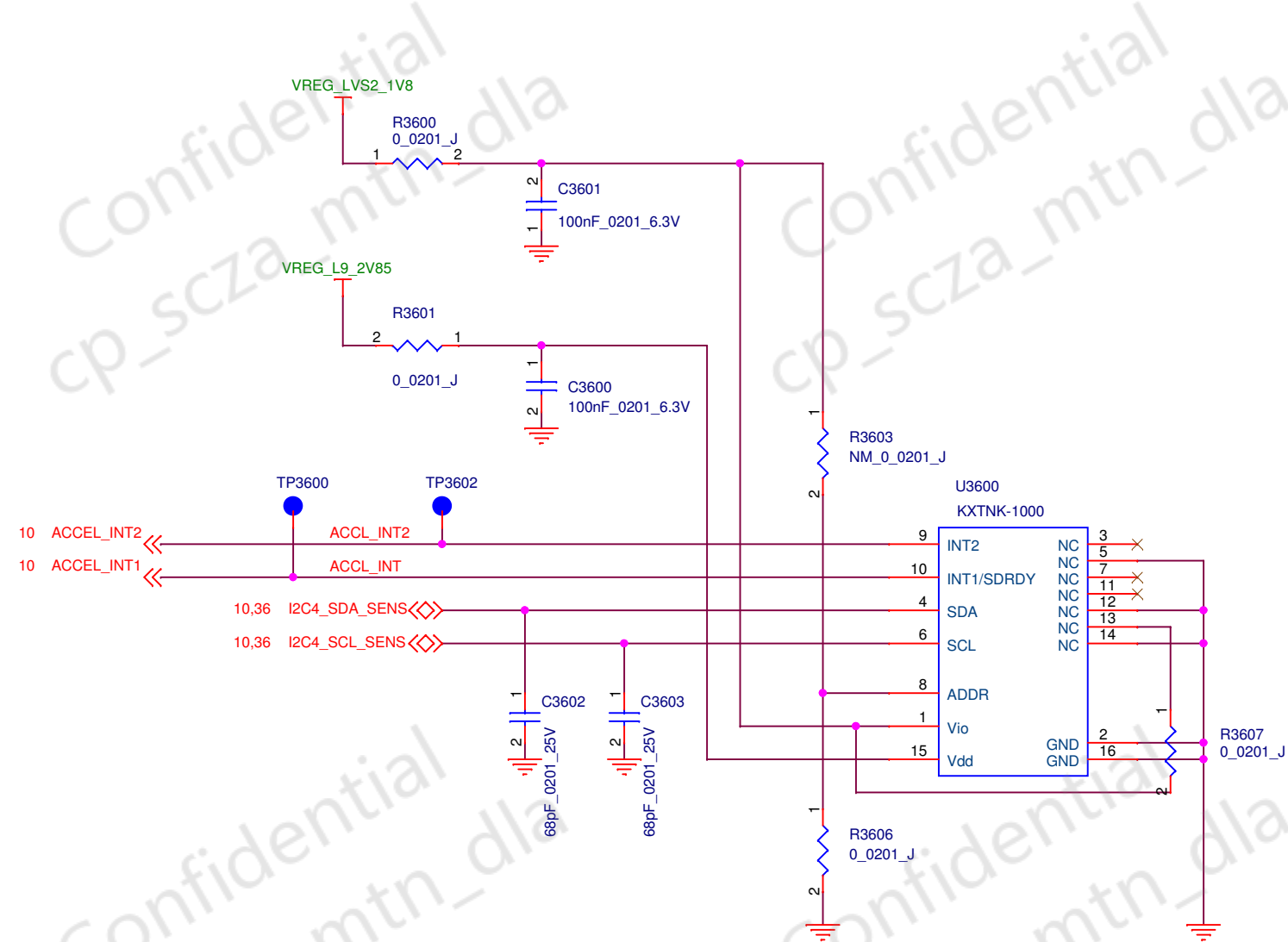
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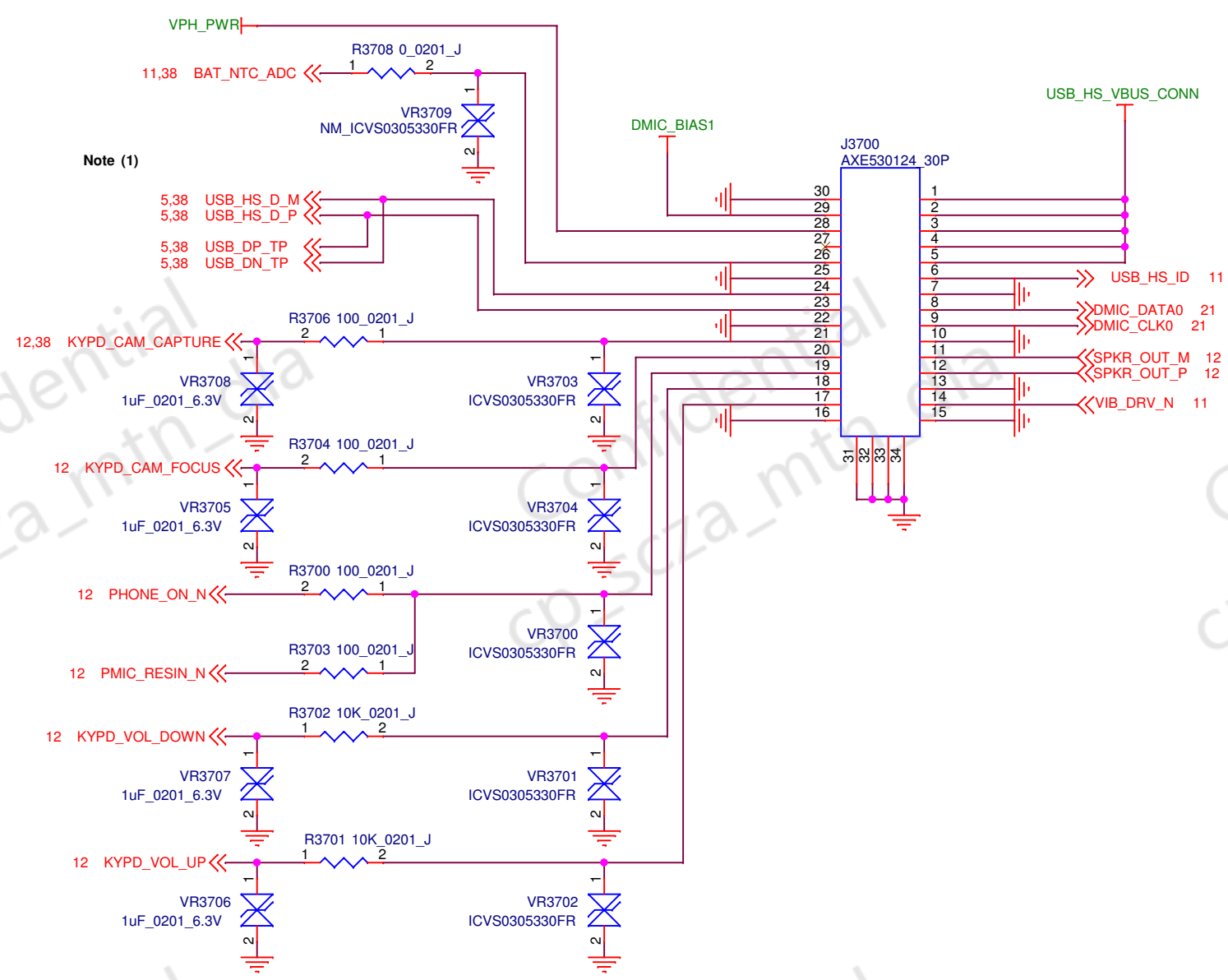
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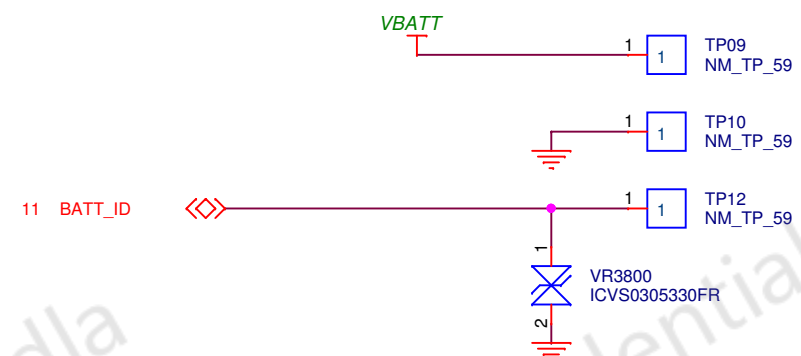
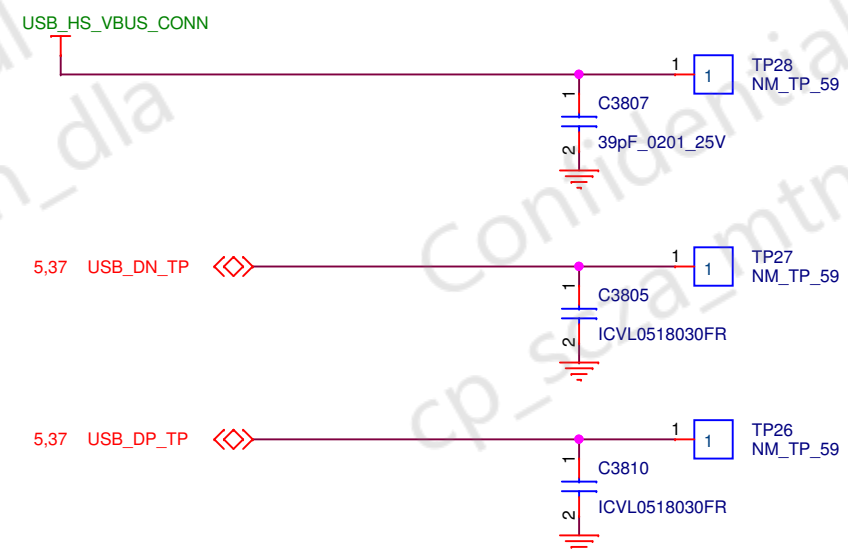
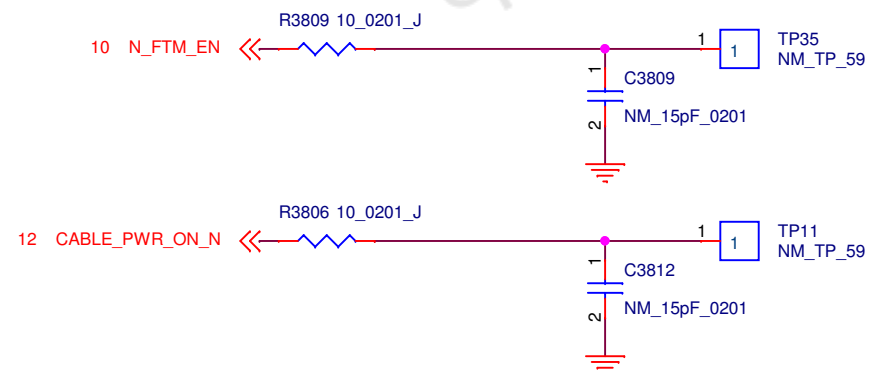
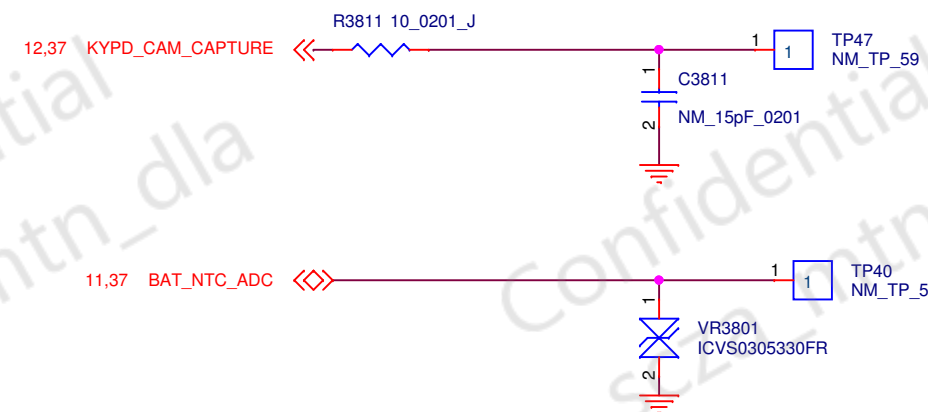
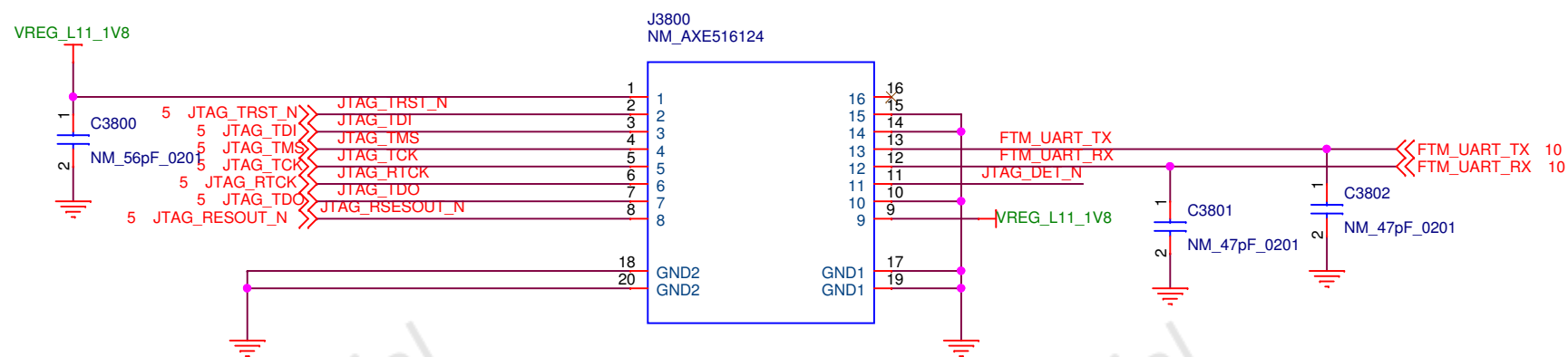
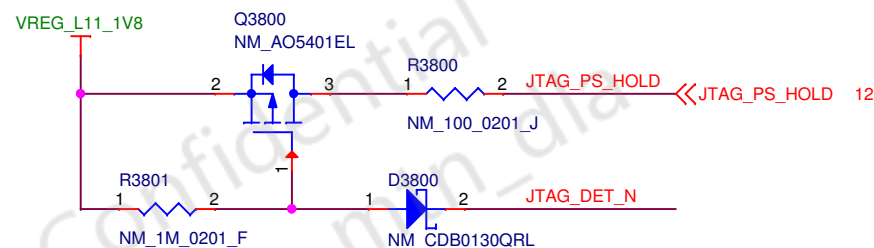
GPS



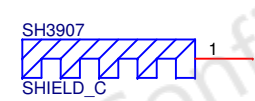
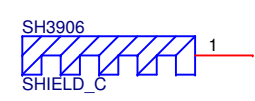
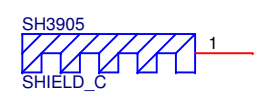
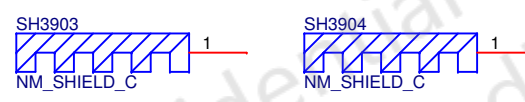
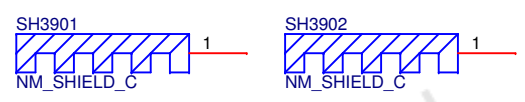
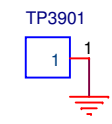
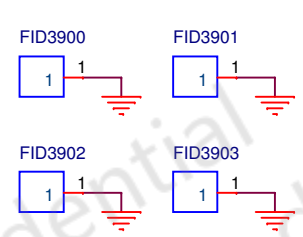
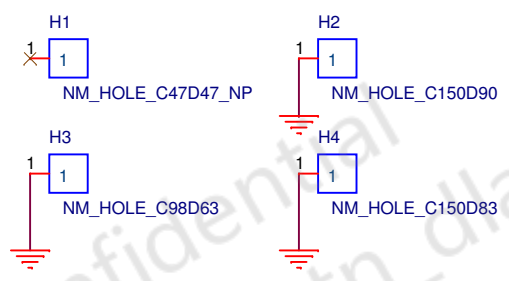
Accelerometer Sensor



Connectors/Vibrator



Debug Conn / TPs

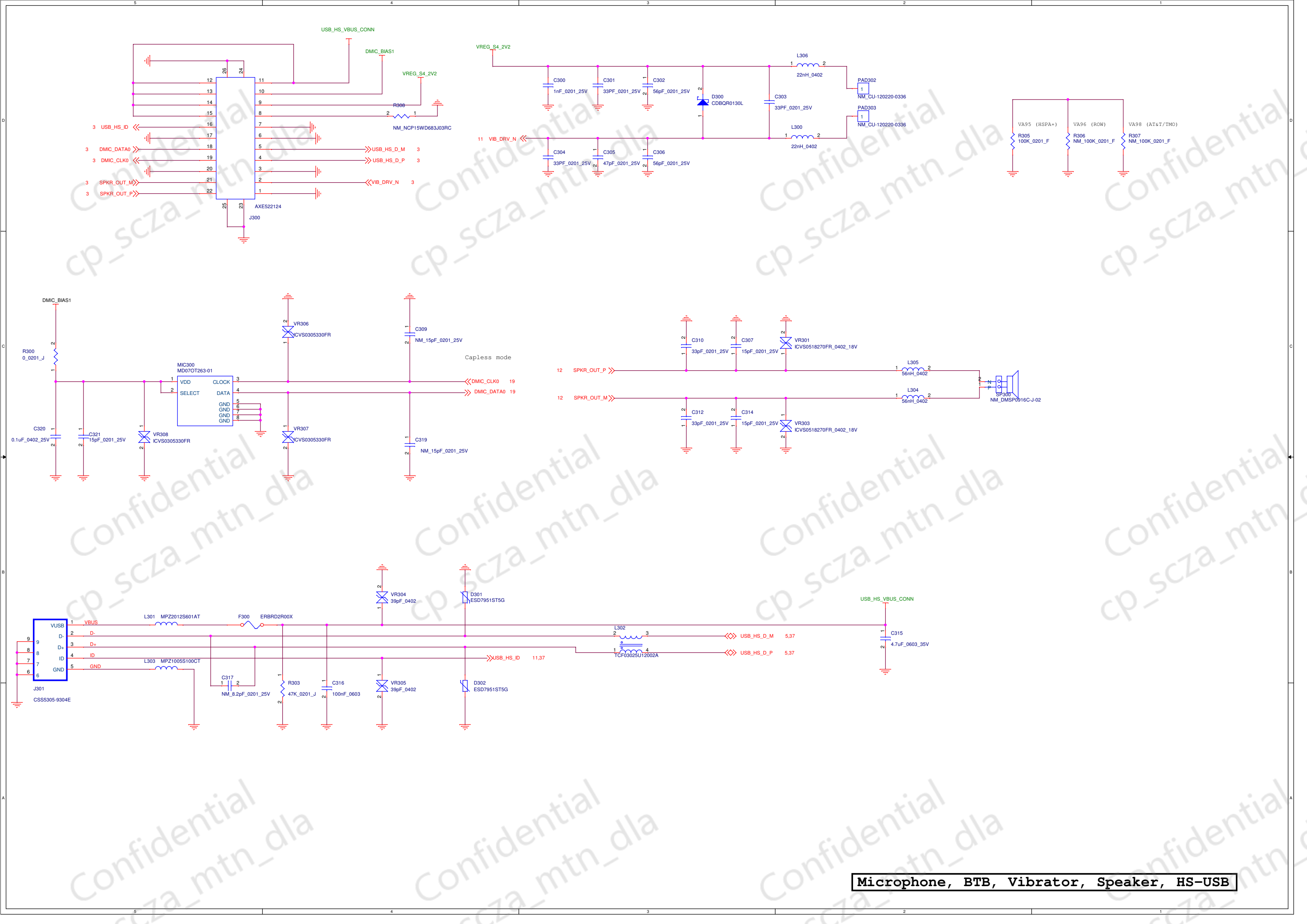


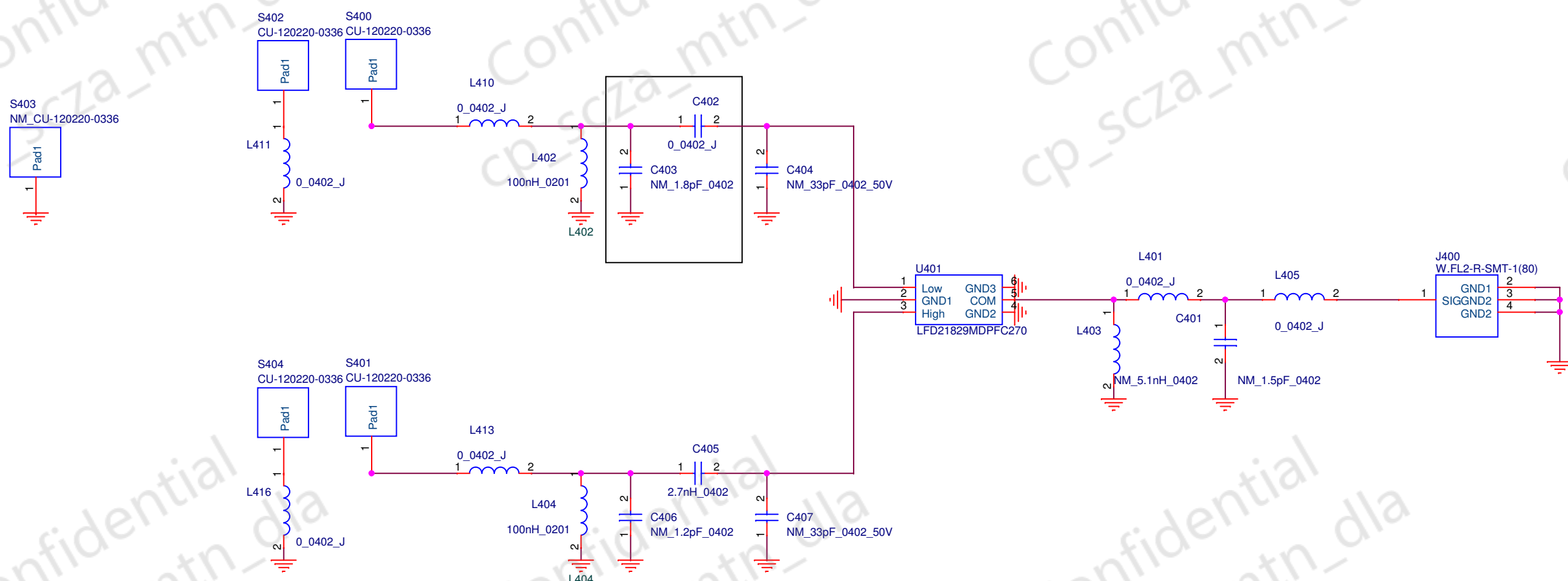
Schematics - Sub board

Service Schematics Sub Board
RM-994/RM-995

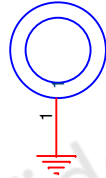
Table of Contents

- 1. Microphone, BTB, Vibrator, Speaker, HS-USB
- 2. RF Front End
- 3. Mechanical Parts Template





H500
NM_HOLE



FID500



FID501



FID502



FID503



SP501



SP502



SP503



SP504



SP505



SP506

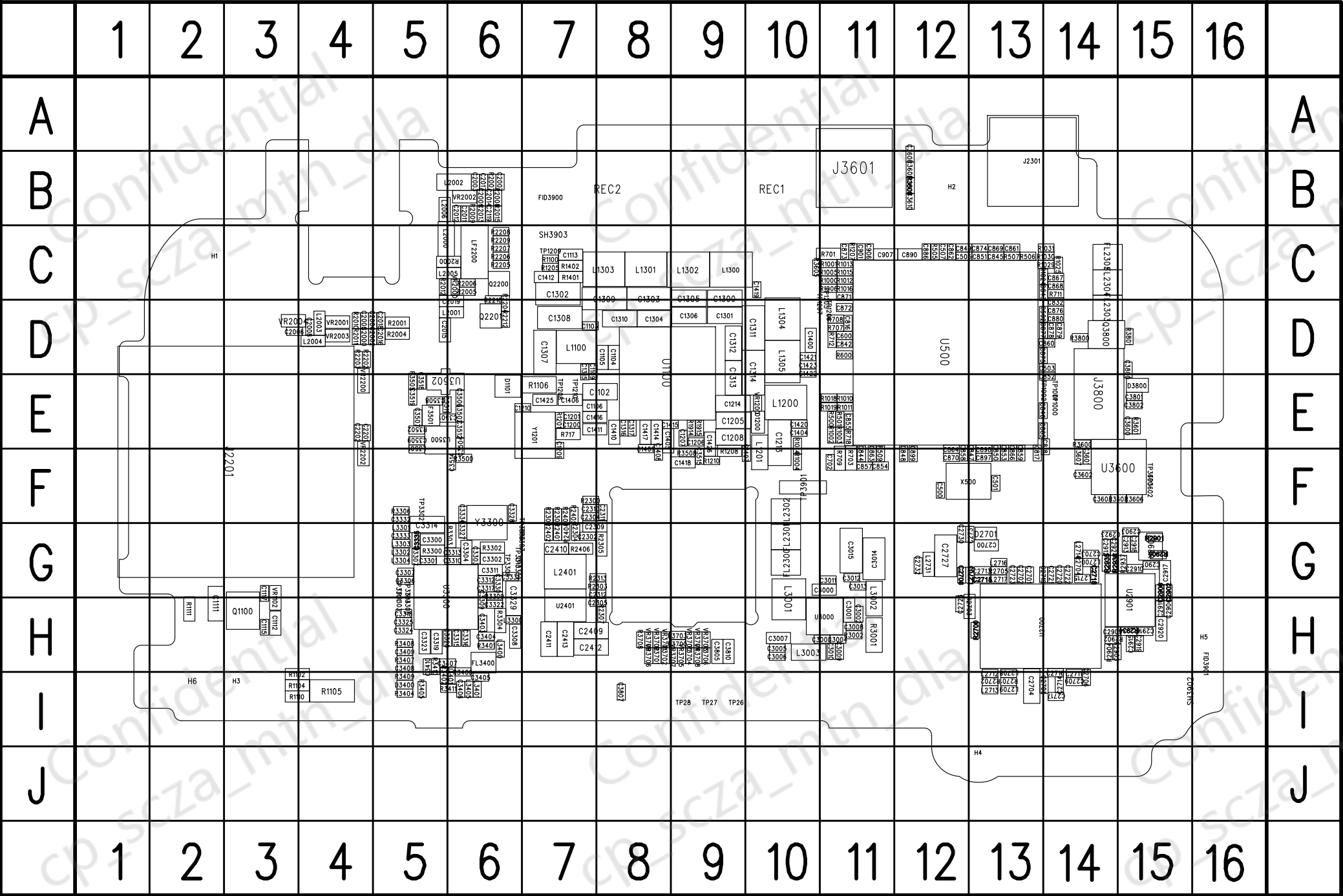


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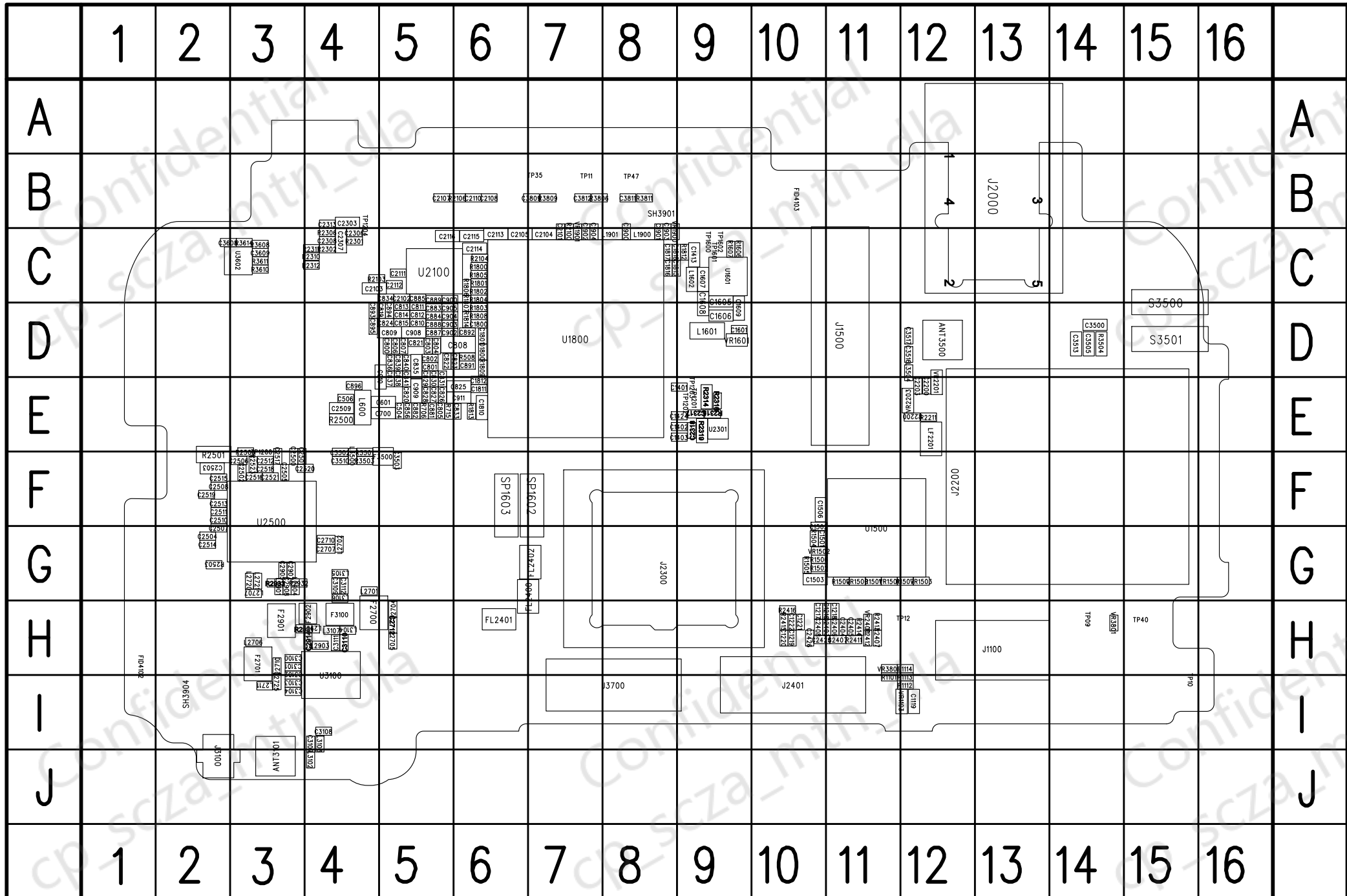


Mechanical Parts Template

Placements - Main board



RM-996 MB Bottom PLACEMENT



C		C1408	F8	C2409	H7	C2919	H15	C3328	F6
C1102	E8	C1409	F8	C2410	G7	C2920	H15	C3329	H6
C1103	D7	C1410	E8	C2411	H7	C2923	G14	C3330	G6
C1104	D8	C1411	E7	C2412	H7	C2924	G14	C3331	G6
C1105	D8	C1412	C7	C2413	H7	C3000	G11	C3332	F5
C1106	E7	C1414	E8	C2700	G13	C3001	H11	C3333	G5
C1109	D7	C1415	E8	C2701	G13	C3002	H11	C3334	F6
C1111	H2	C1416	E7	C2702	G13	C3003	H11	C3335	G5
C1112	H3	C1417	E8	C2703	G14	C3004	H11	C3403	H6
C1113	C7	C1418	F9	C2704	I13	C3005	H10	C3404	H6
C1115	H3	C1419	C10	C2705	I14	C3006	H10	C3405	I6
C1117	G3	C1420	E10	C2706	I14	C3007	H10	C3406	I6
C1200	E7	C1421	D10	C2708	G12	C3008	H11	C3407	H6
C1201	E7	C1422	D10	C2709	I14	C3009	H11	C3408	H5
C1205	E9	C1423	D10	C2711	I14	C3010	H11	C3409	H5
C1206	E9	C1425	E7	C2713	G13	C3011	G11	C3410	H5
C1207	E9	C1426	E9	C2714	I14	C3012	G11	C3501	E6
C1208	E9	C2000	D4	C2715	G13	C3013	G11	C3504	E6
C1209	F7	C2002	D4	C2716	I14	C3014	G11	C3506	E6
C1210	E7	C2003	B6	C2717	I14	C3015	G11	C3507	E5
C1213	E10	C2004	D4	C2718	G14	C3300	G5	C3508	E5
C1214	E9	C2005	D4	C2719	G14	C3301	G5	C3509	E5
C1300	C9	C2006	D3	C2720	G14	C3302	G6	C3511	E5
C1301	D9	C2007	B6	C2721	G14	C3303	G6	C3512	E6
C1302	C7	C2008	D4	C2722	G14	C3304	G6	C3514	F6
C1303	C8	C2009	B6	C2723	G13	C3306	G5	C3515	F9
C1304	D8	C2011	B6	C2726	H12	C3307	G5	C3518	E5
C1305	C9	C2012	B6	C2727	G12	C3308	H6	C3519	E5
C1306	D9	C2013	B6	C2730	G12	C3309	H6	C3600	E15
C1307	D7	C2014	B6	C2731	G13	C3310	G6	C3601	F14
C1308	D7	C2015	D5	C2732	G12	C3311	G6	C3602	F14
C1309	C8	C2016	D5	C2901	G15	C3312	G6	C3603	F14
C1310	D8	C2017	B6	C2902	G15	C3313	G6	C3606	B12
C1311	D10	C2018	D5	C2903	G15	C3314	G5	C3610	B12
C1312	D9	C2019	D6	C2904	H15	C3315	H6	C3800	D15
C1313	E9	C2119	B6	C2906	G15	C3316	H6	C3801	E15
C1314	D10	C2201	E4	C2909	H14	C3317	G6	C3802	E15
C1315	D7	C2202	E4	C2910	G15	C3318	H5	C3805	H9
C1316	E8	C2302	G7	C2911	H15	C3319	H5	C3807	I8
C1317	E8	C2304	F7	C2912	G14	C3320	H5	C3810	H9
C1400	D10	C2305	H8	C2913	G15	C3322	H6	C500	F12
C1404	E10	C2309	G7	C2915	H15	C3323	H5	C501	F13
C1405	E8	C2310	F7	C2916	H15	C3324	H5	C502	D14
C1406	E7	C2311	F8	C2917	G15	C3325	H5	C503	D14
C1407	F10	C2312	G8	C2918	G15	C3327	G6	C505	C12

Top Side Placement Index

C507	C12	C886	C12	L2715	G14	R1100	C7	R2313	G8
C600	D11	C890	C12	L2716	G13	R1102	I3	R2401	G7
C702	F11	C897	F13	L2717	G13	R1104	I3	R2402	G7
C816	D11	C898	F13	L2731	G12	R1105	I4	R2403	F7
C817	F13	C899	F12	L3001	H10	R1106	E7	R2404	G7
C818	E14	C901	C11	L3002	H11	R1110	I3	R2405	F7
C832	D14	C906	C11	L3003	H10	R1111	H2	R2406	G7
C842	D11	C907	C11	L3300	H6	R1201	E7	R2700	H13
C843	C14	D		L3301	G5	R1205	C7	R2701	I13
C844	F11	D1101	E6	L3302	G5	R1207	C11	R2702	I13
C845	C13	D1200	E10	L3303	G5	R1208	F9	R2703	H13
C846	E13	D2701	G13	L3304	G5	R1210	F9	R2704	G14
C847	F13	D3400	I5	L3400	H6	R1401	C7	R2705	G13
C848	F12	D3800	E15	L3401	I6	R1402	C7	R2901	G15
C849	C12	F		L3405	I6	R1914	E9	R2902	H14
C850	F13	F3501	E5	L3501	F5	R1915	E9	R2903	H14
C851	C13	FL2300	G10	L3502	E6	R2000	C6	R2904	H14
C852	E14	FL2301	G10	LF2200	C6	R2001	D5	R2905	G15
C853	F13	FL2302	F10	Q		R2004	D5	R2934	H15
C854	F11	FL2303	D14	Q1100	H3	R2005	C6	R2935	G14
C855	E11	FL2304	C14	Q2200	C6	R2006	C6	R2936	G14
C857	F11	FL2305	C14	Q2201	D6	R2007	B6	R2937	G15
C858	F12	FL3400	H6	Q3800	D14	R2008	B6	R3001	H11
C859	F13	J		R		R2009	B6	R3002	H11
C860	D14	J2000	A4	R1000	C11	R2010	D4	R3300	G5
C861	C13	J2201	F4	R1001	C11	R2011	D4	R3302	G6
C862	C12	J2301	B14	R1002	E11	R2012	C5	R3303	G6
C863	F11	J3601	B11	R1003	E11	R2015	B6	R3304	H6
C864	F12	J3800	E14	R1004	F10	R2202	D4	R3306	F5
C865	E13	L		R1005	C11	R2203	D4	R3307	G5
C866	F13	L2000	C5	R1006	C11	R2204	D6	R3309	G6
C867	C14	L2001	D6	R1010	E11	R2205	C6	R3401	H6
C868	C14	L2002	B6	R1011	E11	R2206	C6	R3402	I5
C869	C13	L2003	D4	R1012	C11	R2207	C6	R3404	I5
C870	F12	L2004	D4	R1013	C11	R2208	C6	R3405	I5
C871	C11	L2005	C6	R1014	E10	R2209	C6	R3406	I6
C872	D11	L2006	B5	R1015	C11	R2210	D6	R3407	H5
C873	C11	L2401	G7	R1016	C11	R2212	D6	R3408	H5
C874	C13	L2700	G14	R1018	E11	R2300	F7	R3409	I5
C875	D13	L2703	G13	R1019	E11	R2303	G8	R3410	H5
C876	D14	L2708	I13	R1024	C14	R2304	G7	R3411	I6
C877	D14	L2709	I13	R1025	C14	R2305	G8	R3500	F6
C878	D14	L2712	I13	R1029	C14	R2307	H8	R3502	E5
C879	D14	L2713	I13	R1030	C14	R2308	F7	R3505	E5
C880	D14	L2714	G14	R1031	C14	R2309	F7	R3508	F9

Top Side Placement Index

R3600	E14	U500	D12		
R3601	E15	V			
R3602	B12	VR1102	H3		
R3603	F15	VR1200	E10		
R3605	C10	VR2000	C6		
R3606	F15	VR2001	D4		
R3607	F14	VR2002	B6		
R3609	B12	VR2003	D4		
R3700	H9	VR2004	D3		
R3701	H8	VR2200	E4		
R3702	H8	VR2202	F4		
R3703	H9	VR3700	H9		
R3704	H9	VR3701	H8		
R3706	H9	VR3702	H8		
R3708	H8	VR3703	H9		
R3800	D14	VR3704	H9		
R3801	D15	VR3705	H9		
R500	E11	VR3706	H8		
R501	E11	VR3707	H9		
R505	C12	VR3708	H9		
R506	C13	VR3709	H8		
R507	C13	X			
R509	F11	X500	F12		
R600	D11	Y			
R701	C11	Y1201	E7		
R703	F11	Y3300	F6		
R707	D11				
R708	D11				
R709	F11				
R711	C14				
R712	D11				
R717	E7				
R718	E11				
U					
U1100	D8				
U2401	H7				
U2700	H13				
U2901	H15				
U2902	G15				
U3000	H11				
U3300	G5				
U3401	I6				
U3500	E5				
U3502	E5				
U3600	F15				

Top Side Placement Index

A		C2105	C11	C2518	F14	C805	E12	C894	D12
ANT3101	J14	C2107	B12	C2519	F15	C806	D12	C895	D13
ANT3500	D5	C2108	B11	C2520	F13	C807	D12	C896	E13
C		C2110	B11	C2521	F14	C808	D11	C900	C12
C1119	I5	C2111	C12	C2707	G13	C809	D12	C902	D12
C1216	H6	C2112	C12	C2710	G13	C810	D12	C903	D12
C1217	H7	C2113	C11	C2712	H12	C811	D12	C904	D12
C1218	H6	C2114	C11	C2725	I14	C812	D12	C905	D12
C1219	H7	C2115	C11	C2905	G14	C813	D12	C908	D12
C1220	H7	C2116	C12	C2907	G14	C814	D12	C909	E12
C1221	H7	C2200	E5	C2908	G14	C815	D12	C910	E12
C1222	H7	C2203	E5	C2914	H13	C819	D12	C911	E11
C1401	E8	C2303	B13	C3100	H14	C820	E12	D	
C1402	E8	C2306	C13	C3101	H14	C821	D12	D1800	D11
C1403	E8	C2307	C13	C3102	I14	C822	D12	F	
C1413	C8	C2308	C13	C3103	I14	C823	D11	F2700	H13
C1424	E8	C2313	B13	C3104	I14	C824	D12	F2701	H14
C1501	G7	C2317	E8	C3107	I13	C825	E11	F2901	H14
C1502	G7	C2318	E8	C3108	I13	C826	E12	F2902	H13
C1503	G7	C2403	H6	C3109	G13	C827	E12	F3100	H13
C1506	F7	C2404	H6	C3110	H13	C828	E12	F3500	F12
C1601	D8	C2405	H6	C3111	H13	C829	E12	FL2401	H11
C1605	C8	C2406	H6	C3112	G13	C830	E12	FL2402	G10
C1606	D8	C2407	H6	C3500	D3	C831	E12	J	
C1607	C8	C2408	H7	C3502	F13	C833	E11	J1100	H4
C1608	D8	C2425	H7	C3503	F12	C834	C12	J1500	D6
C1609	D8	C2426	H7	C3505	D3	C835	D12	J2000	A4
C1800	D11	C2500	F14	C3510	F13	C836	D12	J2200	F5
C1801	D11	C2501	F14	C3513	D3	C837	E12	J2300	G9
C1810	E11	C2502	F14	C3516	D5	C838	E12	J2401	I7
C1811	E11	C2503	F15	C3517	D5	C839	D12	J3100	J15
C1812	E11	C2504	G15	C3608	C15	C840	D12	J3700	I9
C1815	C9	C2505	F14	C3609	C14	C841	E12	L1601	D8
C1816	C9	C2506	F14	C3809	B10	C856	E12	L1602	C8
C1817	C9	C2507	G15	C3811	B9	C881	E12	L1900	C9
C1818	C9	C2508	F15	C3812	B10	C882	E12	L1901	C9
C1900	C9	C2509	E13	C504	E12	C883	D12	L2701	G13
C1901	C9	C2510	F15	C506	E13	C884	D12	L2702	G13
C1902	C10	C2511	F15	C601	E12	C885	C12	L2704	H12
C1903	C9	C2512	F14	C700	E12	C887	D12	L2705	H12
C1904	C10	C2513	F15	C800	D12	C888	D12	L2706	H14
C2101	C10	C2514	G15	C801	D12	C889	C12	L2707	G14
C2102	C12	C2515	F15	C802	D12	C891	D11	L2710	H14
C2103	C13	C2516	F14	C803	D12	C892	D11	L2711	I14
C2104	C10	C2517	F14	C804	D12	C893	D13	L2720	G14

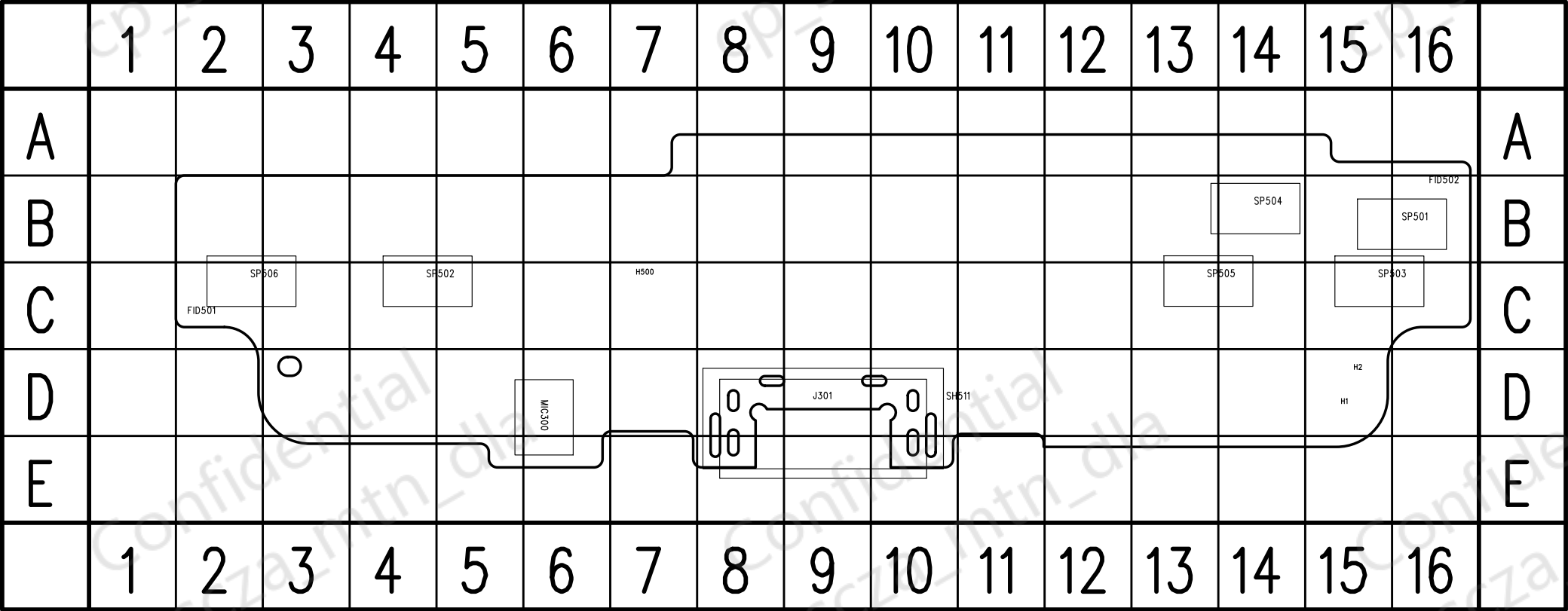
Bottom Side Placement Index

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L2902	H13	R2211	E5	U1500	G6
L2903	H13	R2301	C13	U1601	C8
L2904	G14	R2302	C13	U1800	D10
L3102	J13	R2306	C13	U2100	C12
L3103	I13	R2310	C13	U2301	E8
L3104	H13	R2311	C13	U2500	F14
L3105	G13	R2312	C13	U3100	I13
L3106	G13	R2314	E8	U3602	C14
L3107	H13	R2315	E8	V	
L3500	F13	R2316	E8	VR1103	I5
L3504	D5	R2319	E8	VR1500	G6
L600	E13	R2407	H6	VR1501	G6
LF2201	E5	R2411	H6	VR1502	G7
R		R2412	H6	VR1503	G5
R1101	I6	R2413	H6	VR1601	D8
R1112	I5	R2414	H6	VR1900	C9
R1113	I5	R2415	H7	VR1901	C10
R1114	H5	R2416	H7	VR2201	E5
R1500	G6	R2500	E13	VR2203	E5
R1501	G6	R2501	F15	VR2400	H6
R1502	G7	R2503	G15	VR3800	H6
R1504	G7	R2506	F14	VR3801	H3
R1505	G7	R2523	F14		
R1506	G7	R2931	H14		
R1507	G5	R2932	G14		
R1606	C8	R2933	G14		
R1607	C8	R3501	F13		
R1800	C11	R3503	F13		
R1801	C11	R3504	D3		
R1802	C11	R3608	C14		
R1803	D11	R3610	C14		
R1804	C11	R3611	C14		
R1805	C11	R3614	C14		
R1806	C11	R3806	B10		
R1807	D11	R3809	B10		
R1808	D11	R3811	B9		
R1809	D11	R508	D11		
R1812	C8	R706	E12		
R1813	E11	R715	E12		
R1814	D11	S			
R2100	C10	S3500	C2		
R2103	C13	S3501	D2		
R2104	C11	SP1602	F10		

Bottom Side Placement Index

Placements - Sub Board

RM-996 SB TOP PLACEMENT



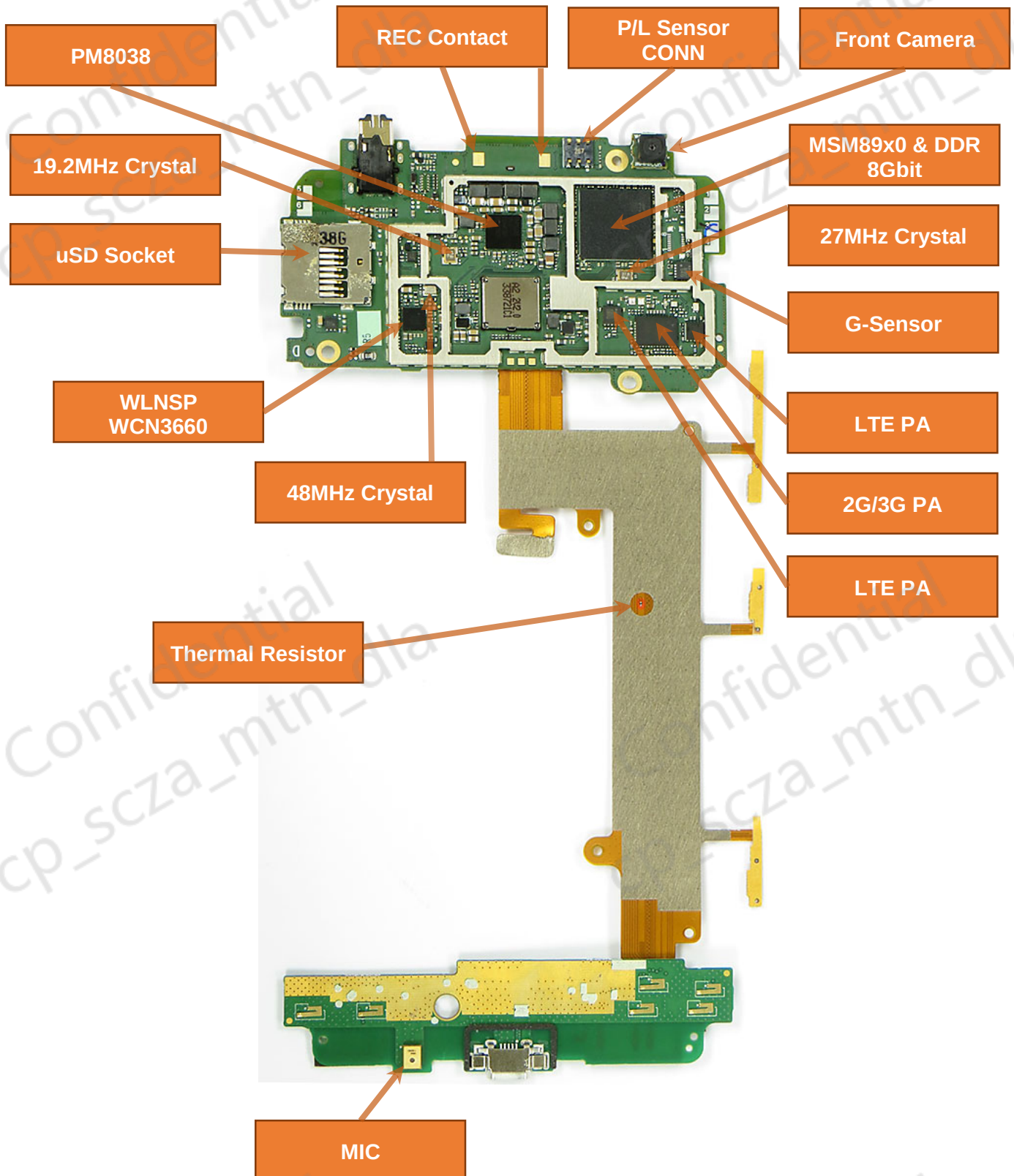
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B	FID503 R308	J400		J300	E308 C316 C315 VR303 L304 L305 VR301 VR305	L301 VR303 L304 L305 VR301 VR305		SP300			PAD303	PAD302		C306 O302 O300 O301 C303			B
C		L403 C401 L405	J401	L404 C407 L416	L405 C406 L413	C403 C402 L411			L303	V320 E320 S403	S403		C319 VR307 C309 VR306		FID500		C
D			S404	S401	S402	S400											D
E																	E
	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	

C		L402	C12						
C300	B4	L403	C15						
C301	B3	L404	C13						
C302	B3	L405	C15						
C303	B3	L410	C12						
C304	B3	L411	C12						
C305	B3	L413	C13						
C306	B4	L416	C14						
C307	B11	R							
C309	C4	R300	C6						
C310	B12	R303	B12						
C312	B12	R305	C3						
C314	B11	R306	C3						
C315	B12	R307	C3						
C316	B12	R308	B16						
C317	B12	S							
C319	C4	S400	D11						
C320	C6	S401	D13						
C321	C6	S402	D12						
C401	C15	S403	D6						
C402	C12	S404	D14						
C403	C12	SP300	B9						
C404	C12	U							
C405	C13	U401	C14						
C406	C13	S							
C407	C14	VR301	B11						
D		VR303	B11						
D300	B3	VR304	B12						
D301	C12	VR305	B11						
D302	B12	VR306	C4						
F		VR307	C4						
F300	A12	VR308	C6						
J									
J300	B14								
J301	D9								
J400	B15								
L									
L300	B3								
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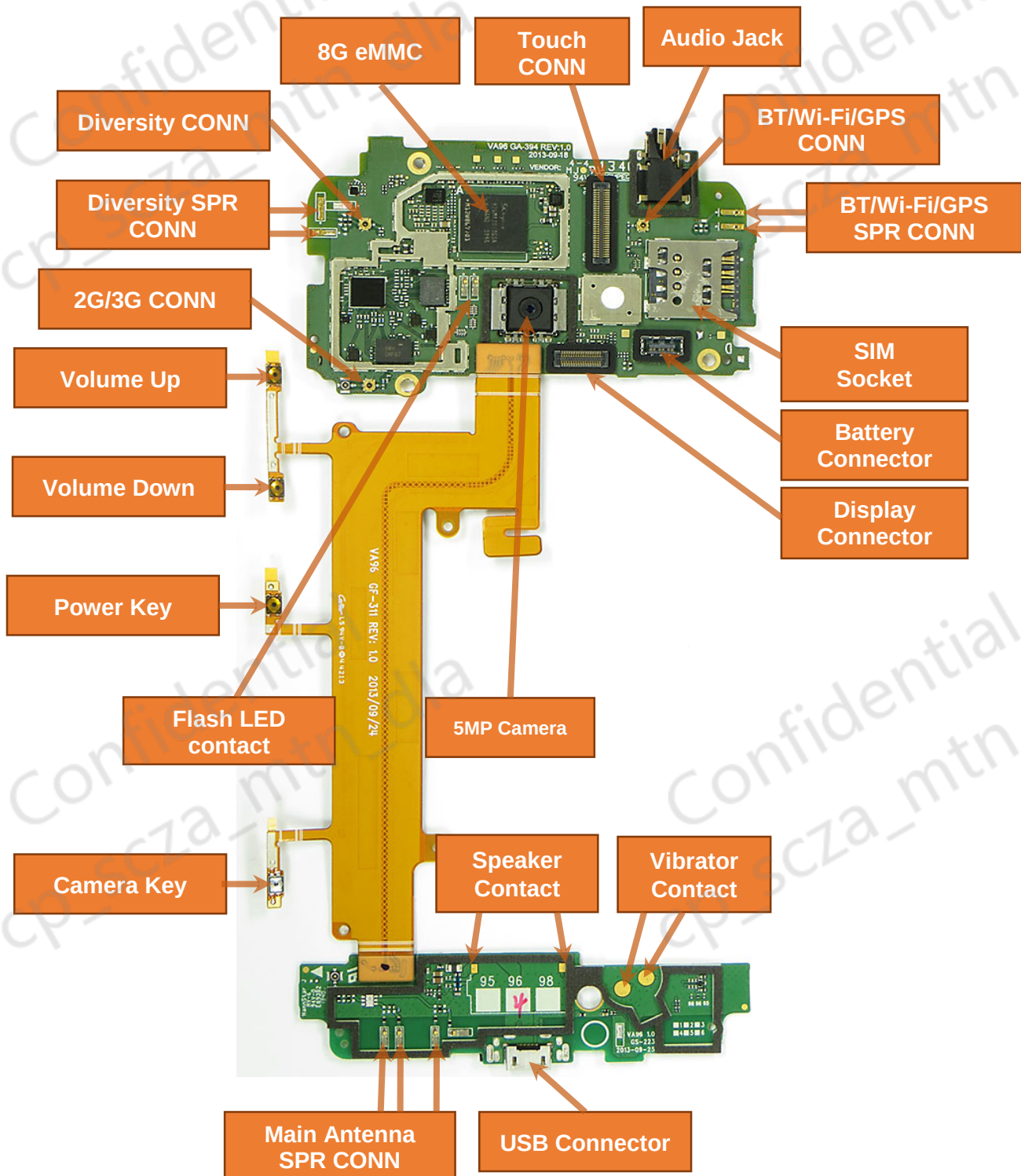
Bottom Side Placement Index

Key Components

Main Board Top Side



Main Board Bottom Side



D-Cover



A-Cover

