

Service Schematics

NOKIA 3230

RM-51

Introduction

IMPORTANT:

This document is intended for use by authorized NOKIA service centers only.

“Service Schematics” was created with focus on customer care. The purpose of this document is to provide further technical repair information for NOKIA mobile phones on Level 3/4 service activities. It contains additional information such as e.g. “Component finder”, “Frequency band table” or “Antenna switch table”. The “Signal overview” page gives a good and fast overview about the most important signals and voltages on board. Saving process time and improving the repair quality is the aim of this document. It is to be used additionally to the service manual and other training or service information such as Service Bulletins.

All measurements were made using following equipment:

- Nokia repair SW : Phoenix version 2004.46.4.75
- Oscilloscope : Fluke PM 3380A/B
- Spectrum Analyzer : Advantest R3162 with an analog probe
- RF-Generator / GSM Tester : Rhode & Schwarz CMU 200
- Multimeter : Fluke 73 Series II

While every endeavour has been made to ensure the accuracy of this document, some errors may exist. If the reader finds any errors, NOKIA should be notified in writing.

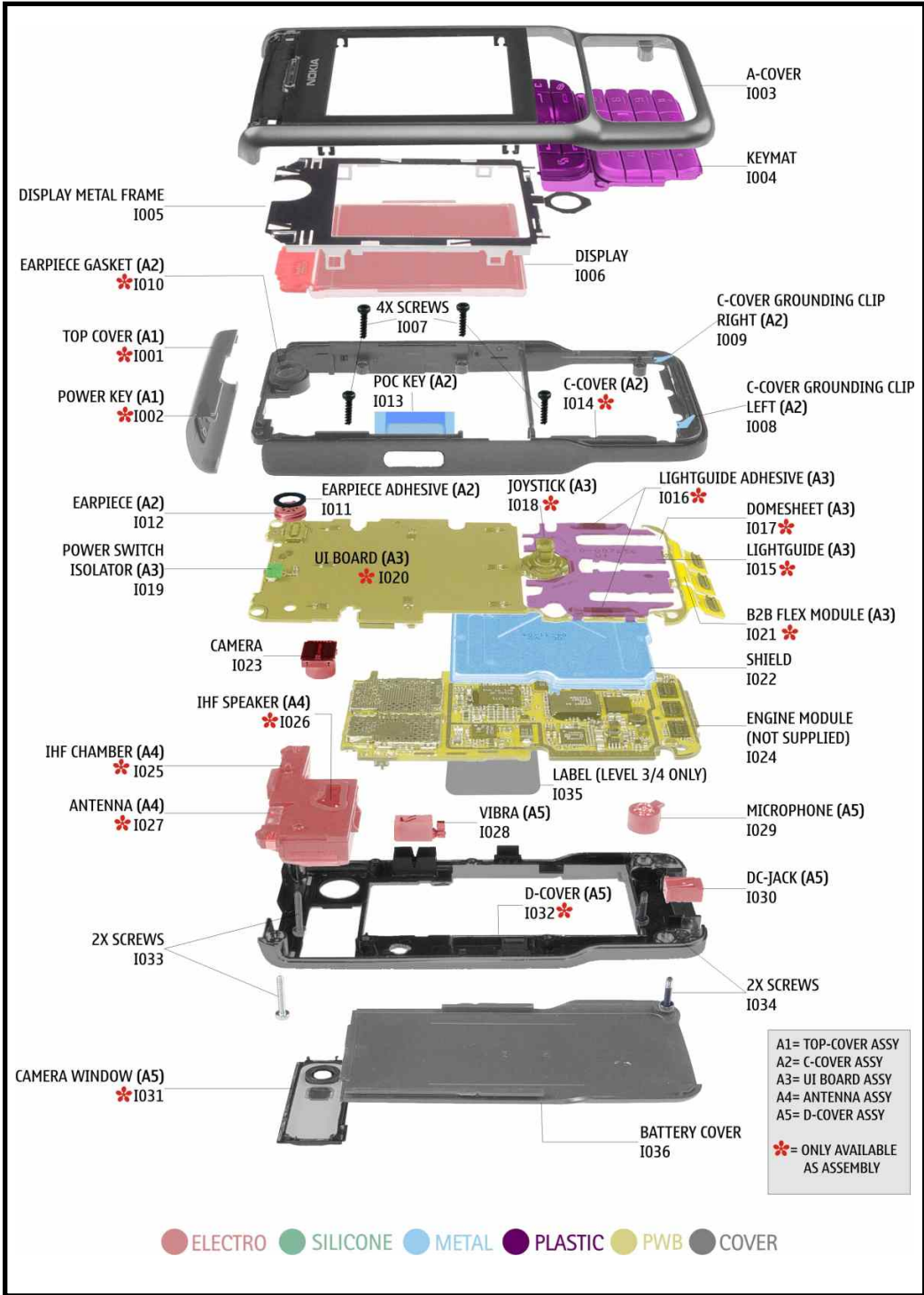
Please send E-Mail to: training.sace@nokia.com

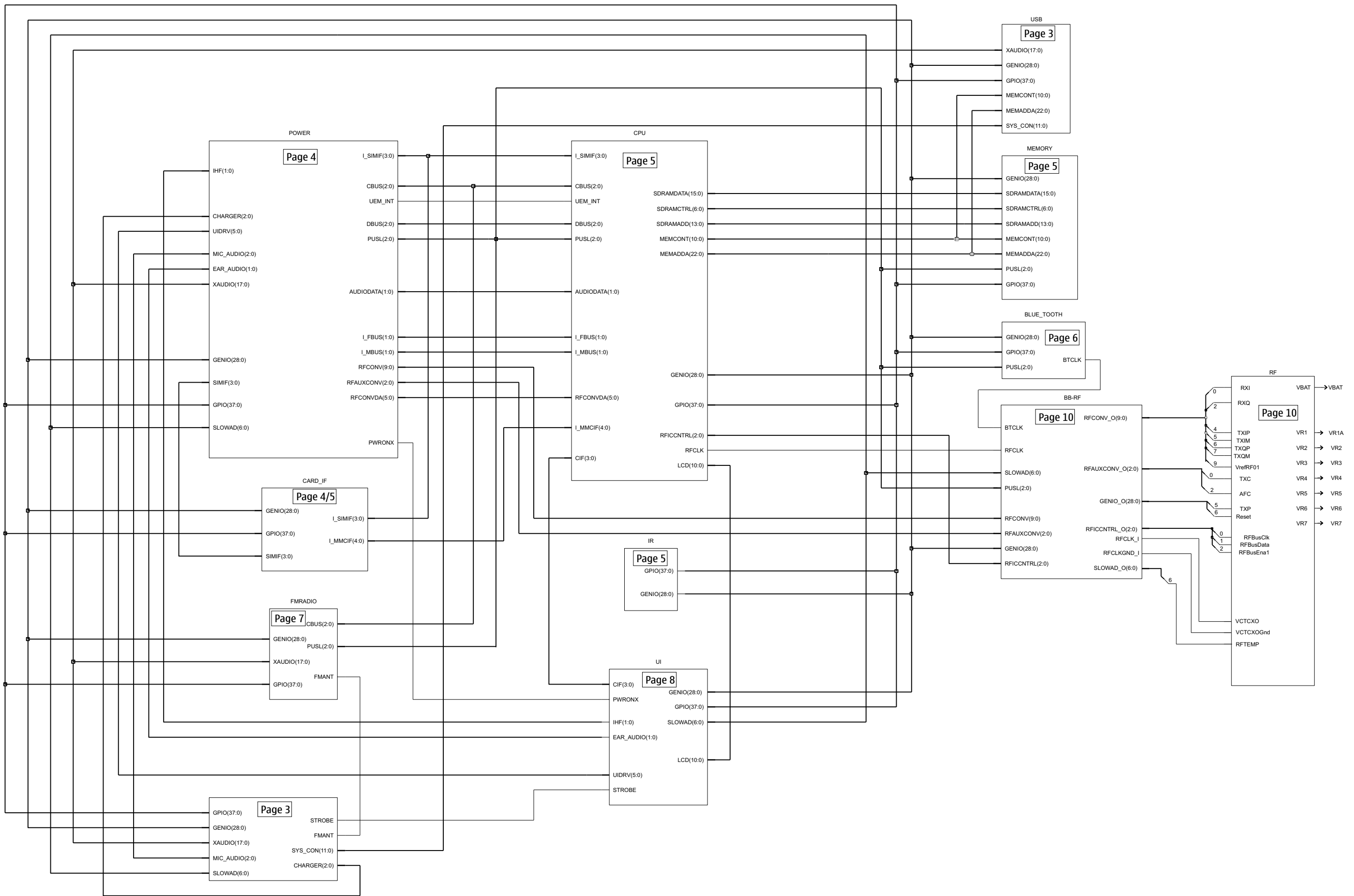
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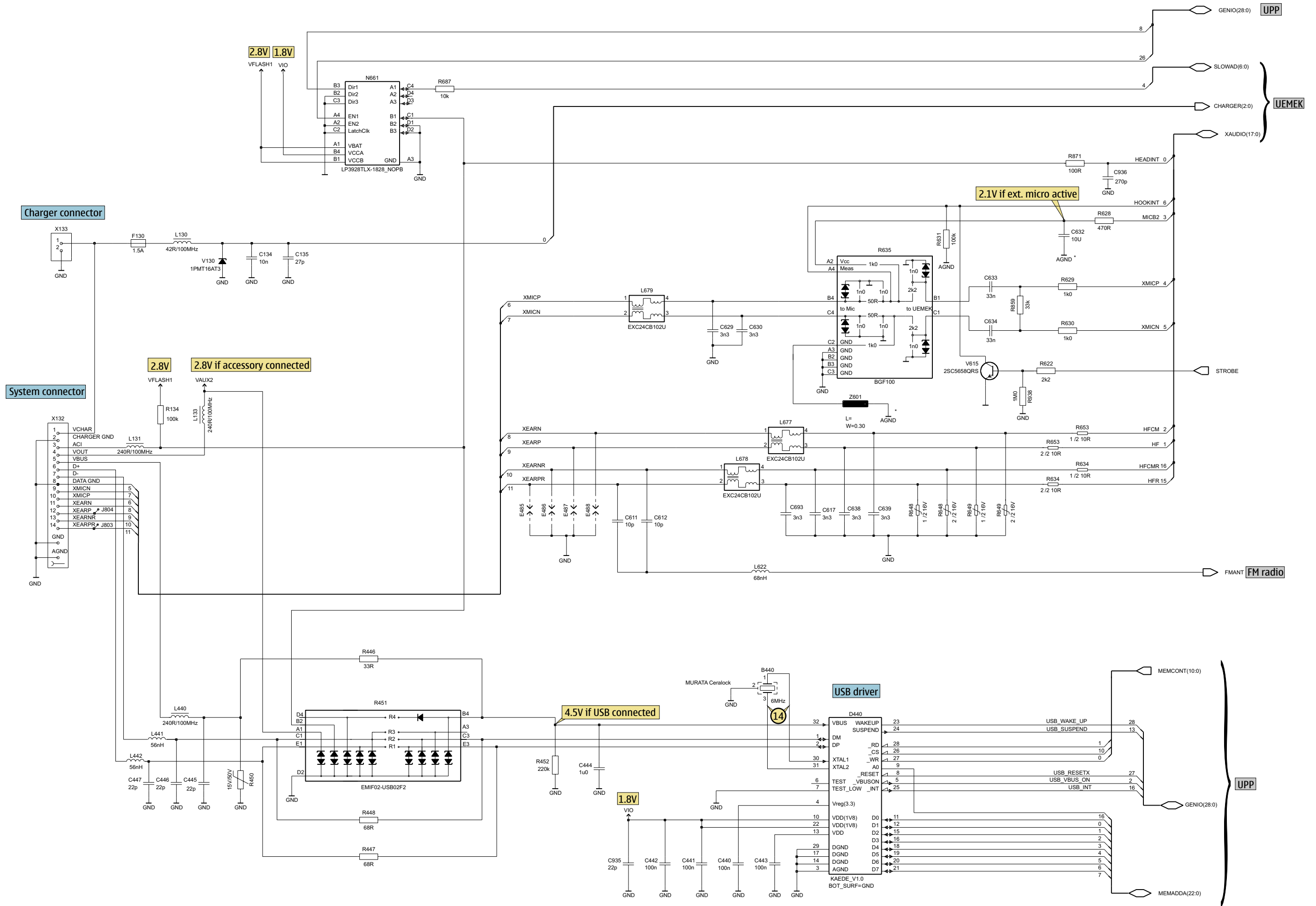


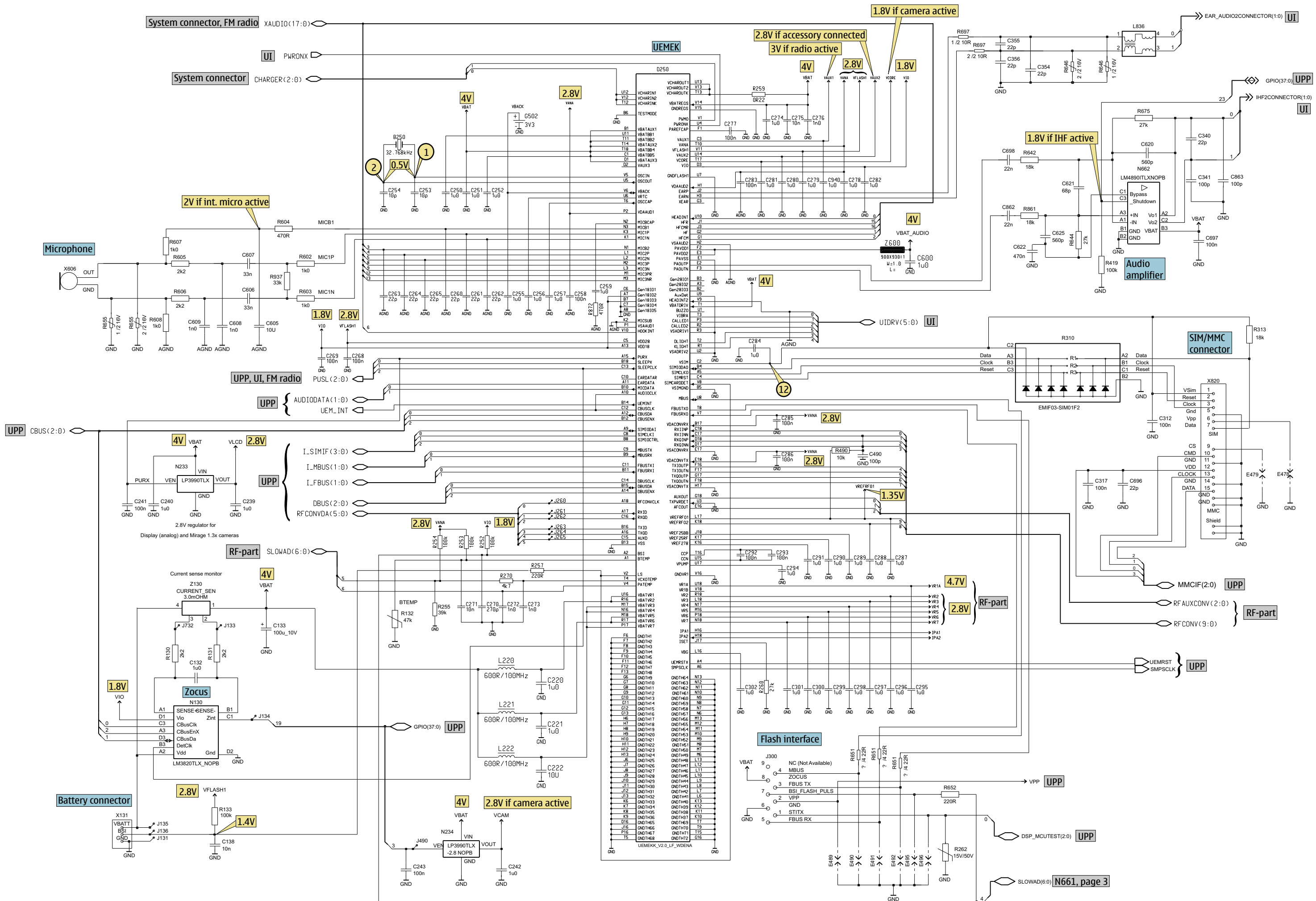
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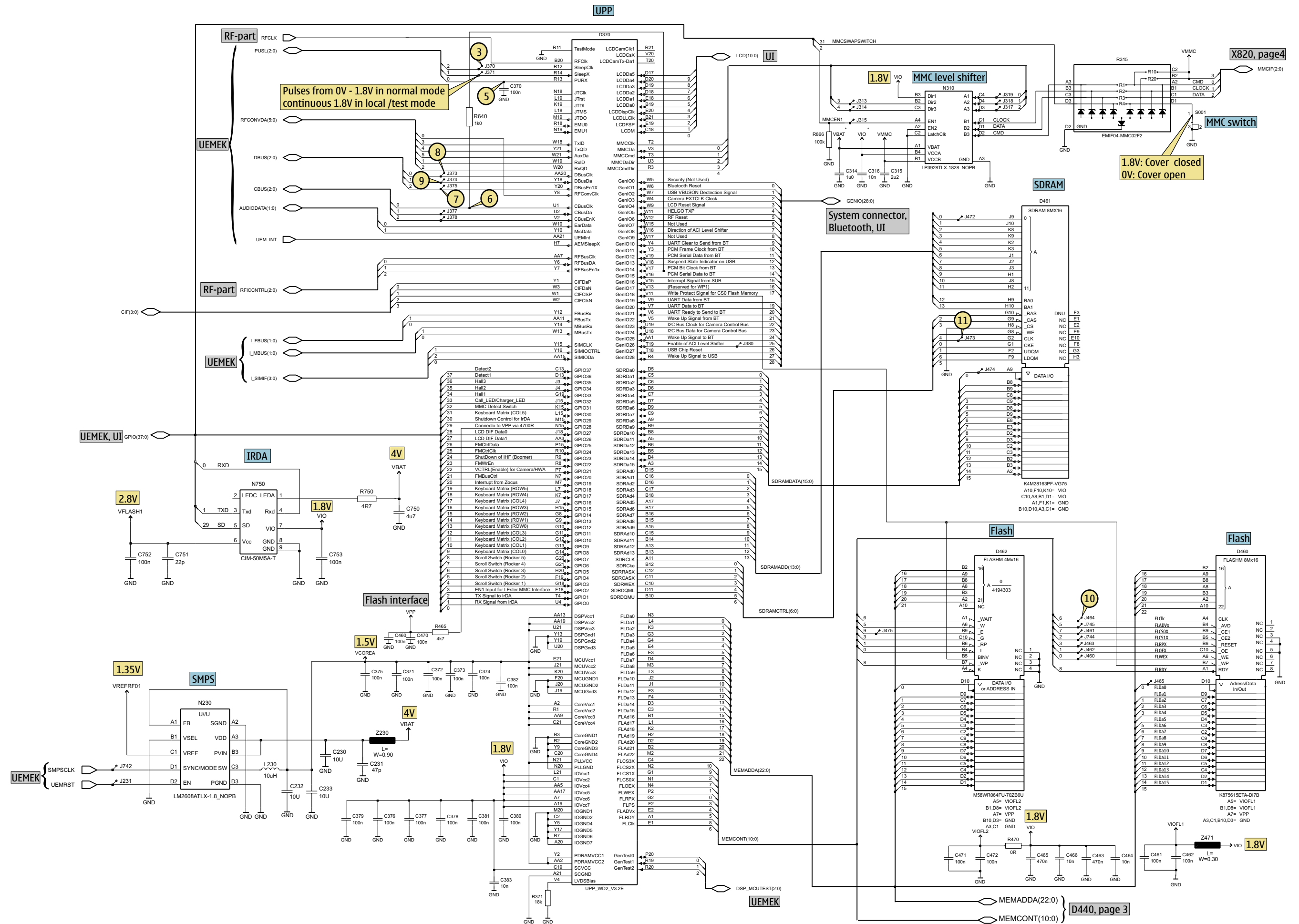
Exploded view and component disposal







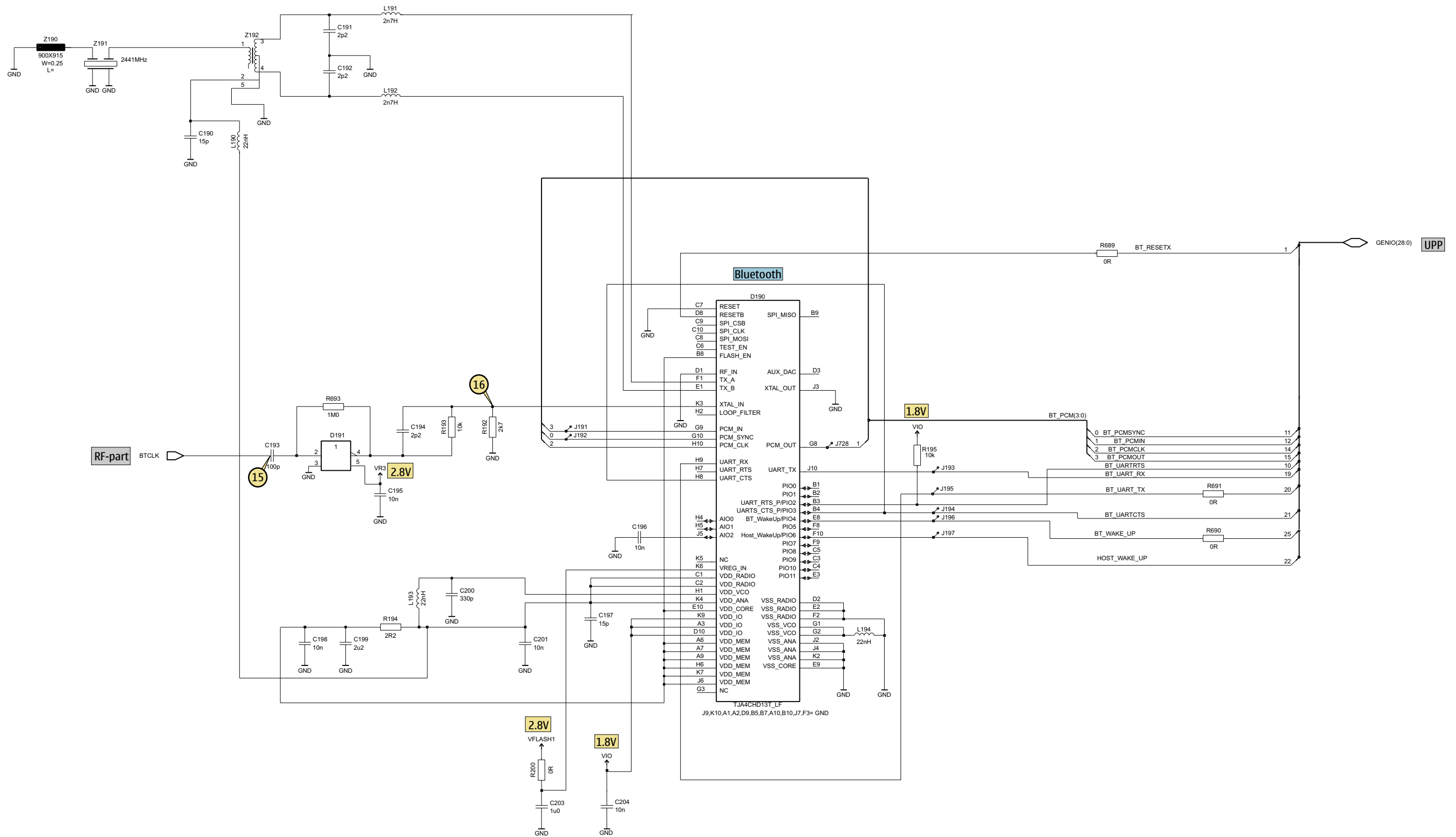


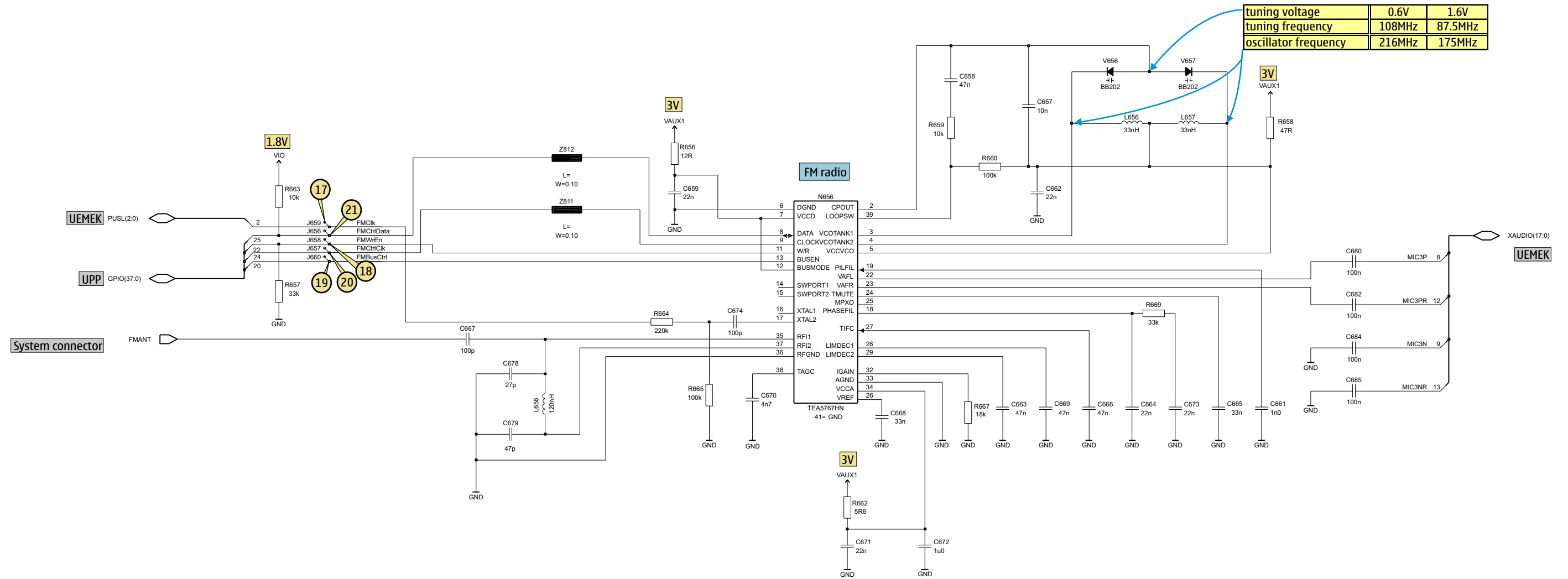


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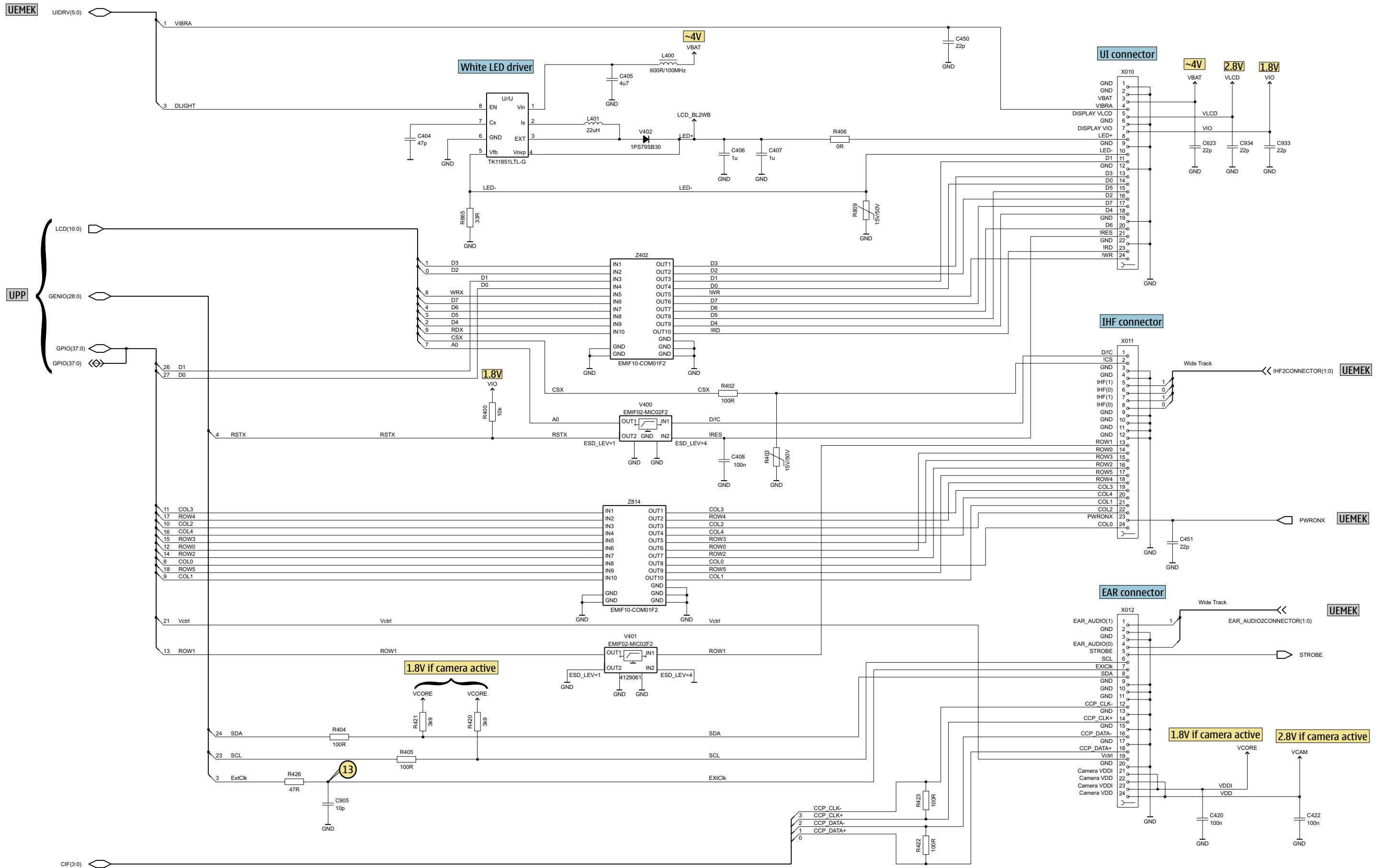
1.8V: Cover closed
0V: Cover open

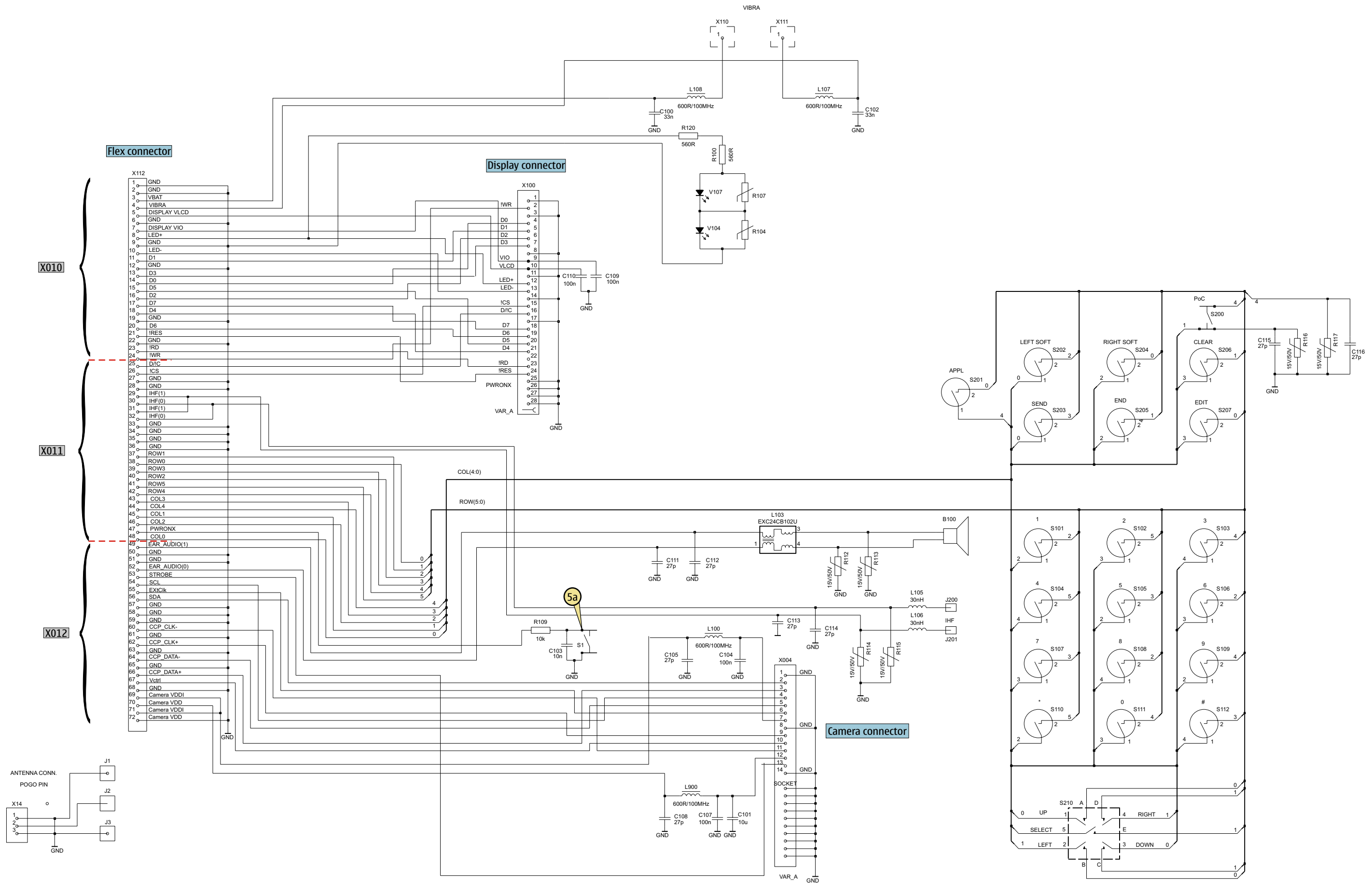
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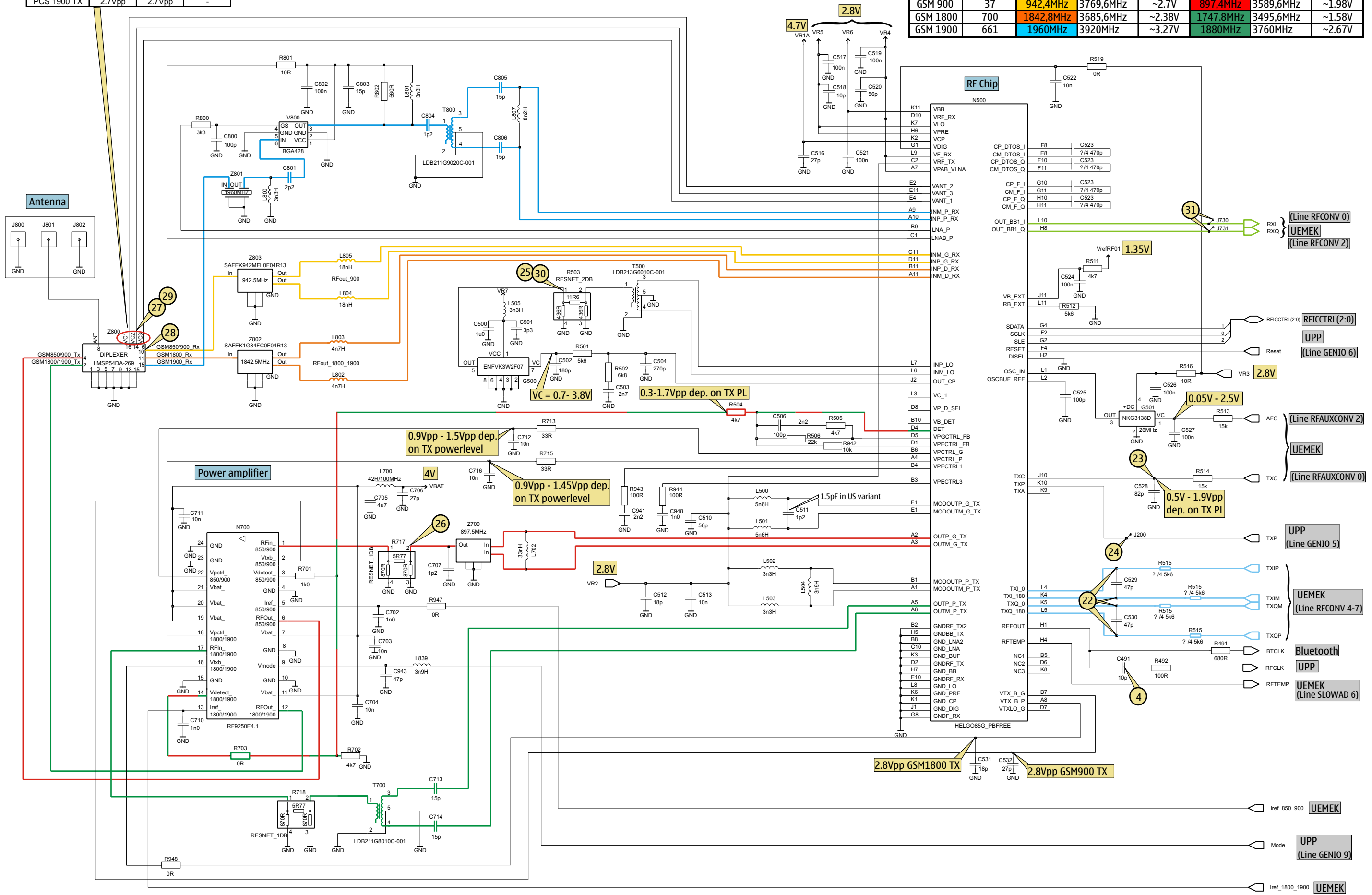
tuning voltage	0.6V	1.6V
tuning frequency	108MHz	87.5MHz
oscillator frequency	216MHz	175MHz

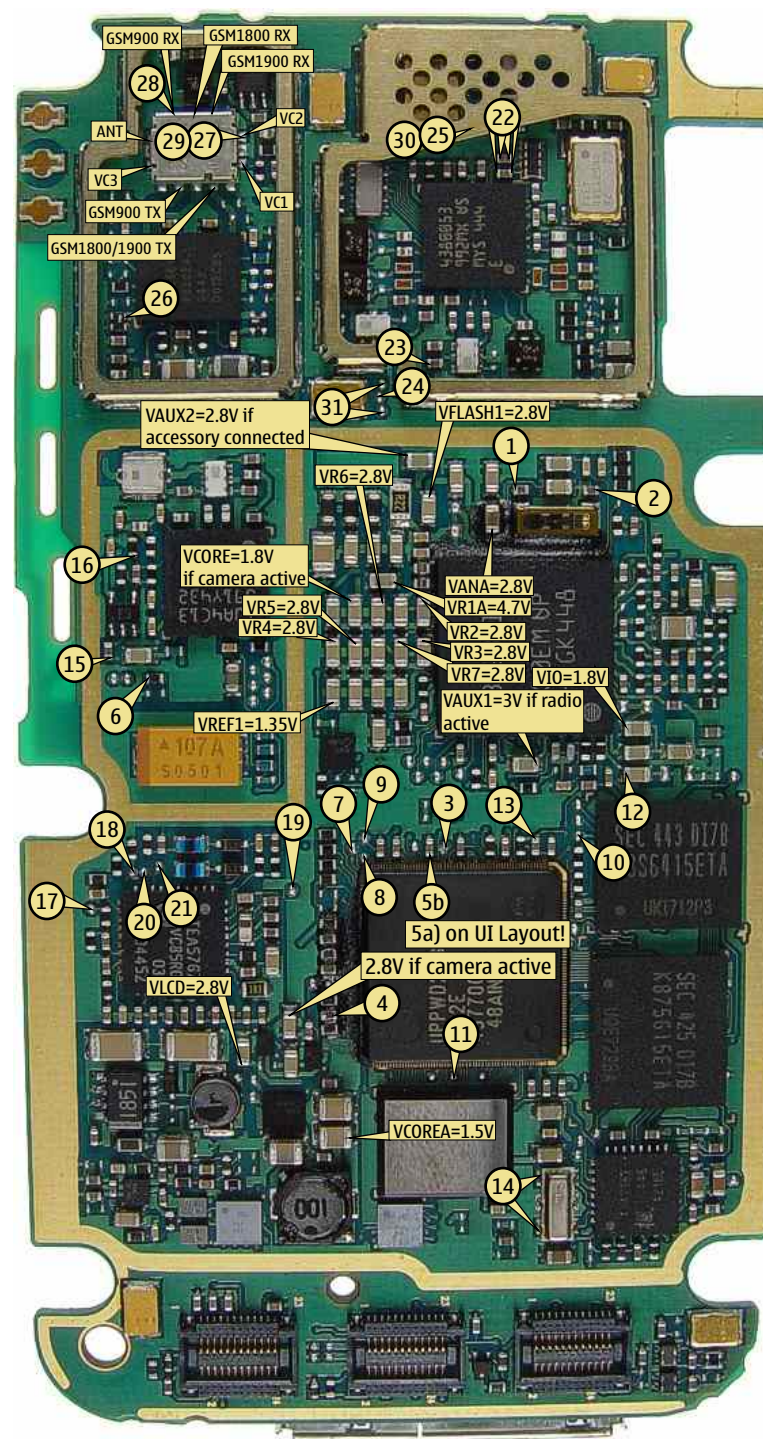
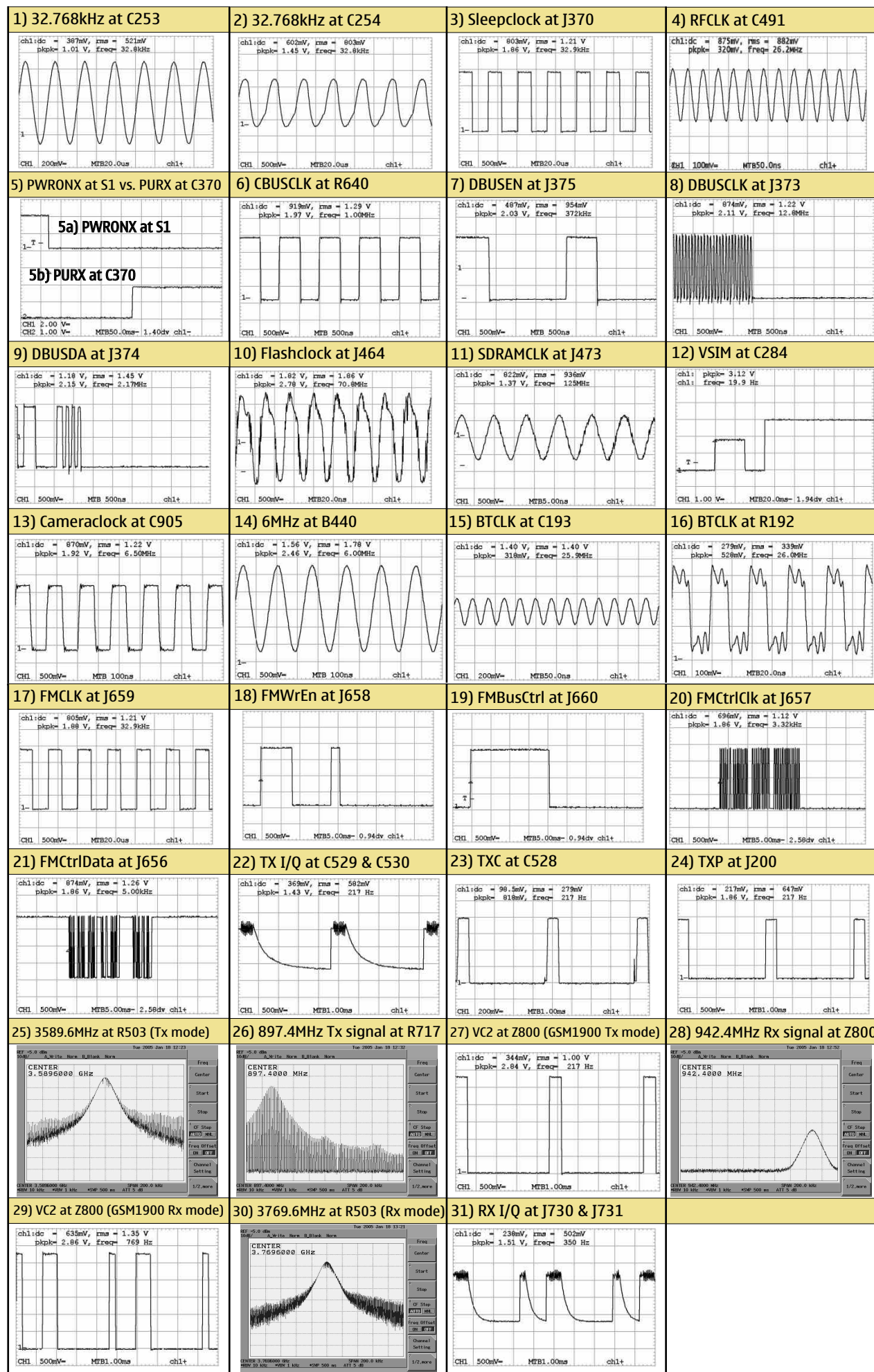




	Vc1	Vc2	Vc3
EGSM 900 RX	-	-	-
DCS 1800 RX	-	-	-
PCS 1900 RX	-	2.7Vpp	-
EGSM 900 TX	-	-	2.7Vpp
DCS 1800 TX	2.7Vpp	2.7Vpp	-
PCS 1900 TX	2.7Vpp	2.7Vpp	-

Band	Channel	RX	VCO/RX	VC/RX	TX	VCO/TX	VC/TX
GSM 900	37	942.4MHz	3769.6MHz	~2.7V	897.4MHz	3589.6MHz	~1.98V
GSM 1800	700	1842.8MHz	3685.6MHz	~2.38V	1747.8MHz	3495.6MHz	~1.58V
GSM 1900	661	1960MHz	3920MHz	~3.27V	1880MHz	3760MHz	~2.67V





B	R104	V5	
B100	C7	R107	V7
C	R109	C5	
C100	G9	R112	C5
C101	F9	R113	C5
C102	G10	R114	U5
C103	C5	R115	U5
C104	E9	R116	U4
C105	E10	R117	U4
C107	E8	R120	U6
C108	E8	V	
C109	B9	V104	V5
C110	B9	V107	V7
C111	C5	X	
C112	C5	X004	D9
C113	U4	X6	G5
C114	U4	X7	J5
C115	U4	X8	F9
C116	U4	X10	U10
J	X12	U3	
J1	B3	X14	G2
J2	B4	X100	C9
J3	B5	X110	H10
J200	D5	X111	H10
J201	E5	X112	V6
L	X112	V6	
L100	E9	X113	E9
L103	C6	X114	E6
L105	D6	X115	E3
L106	D6	X116	I9
L107	G10	X117	M9
L108	G9	X118	M6
L900	E8	X119	M3
R	X120	I3	
R100	U6		

