

Nokia Customer Care

Service Manual

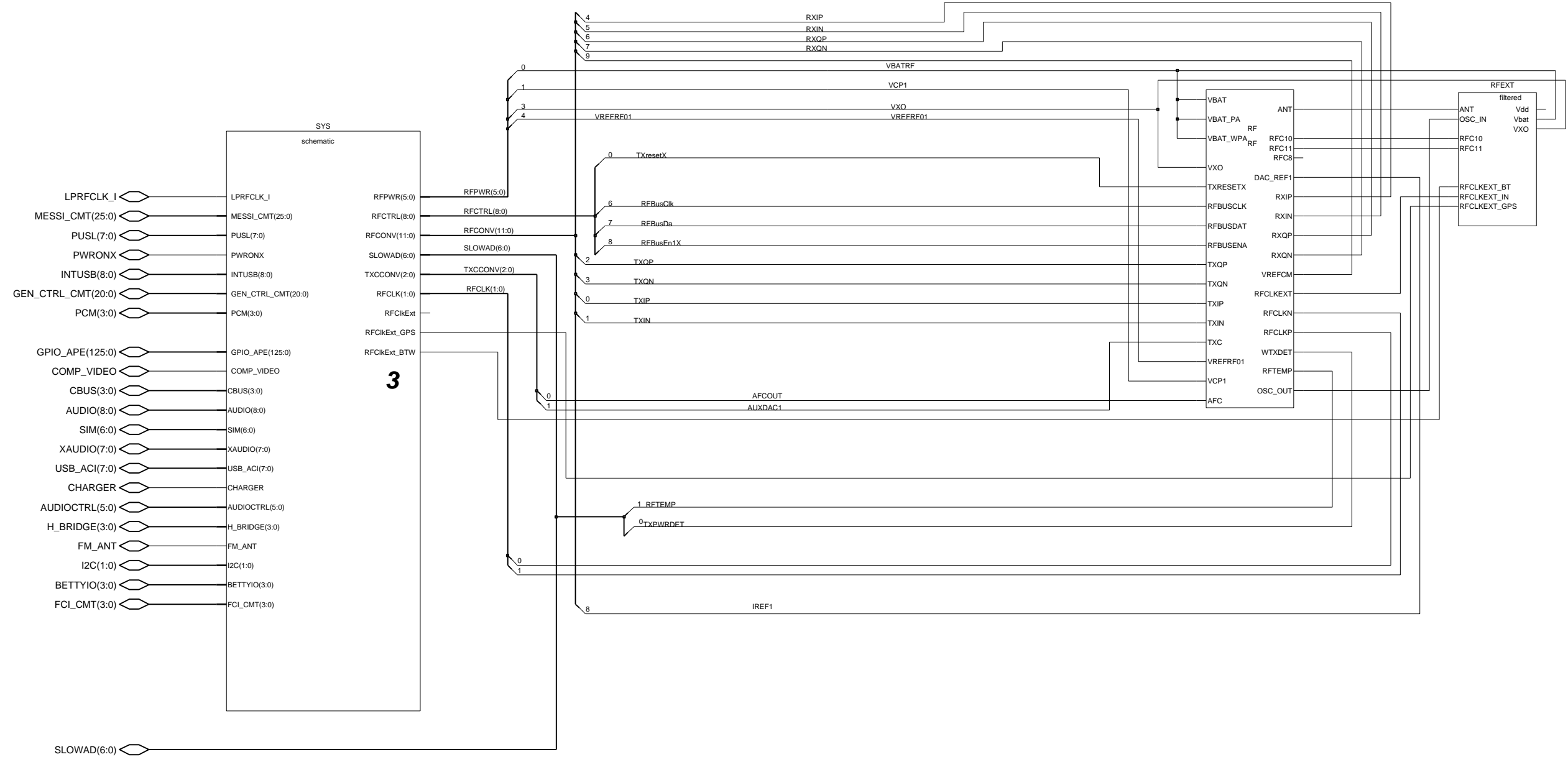
RM-367 (Nokia 6210 Navigator)

Schematics

Part No: (Issue 1)

COMPANY CONFIDENTIAL





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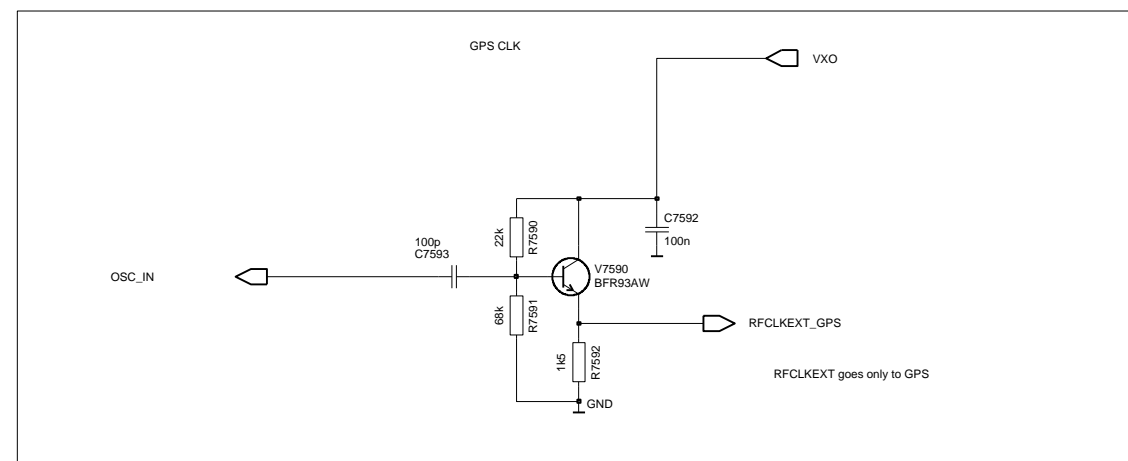
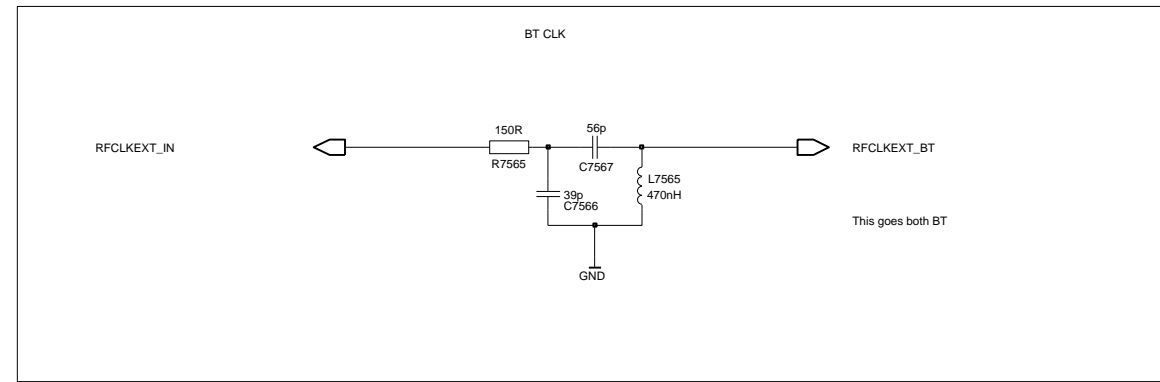
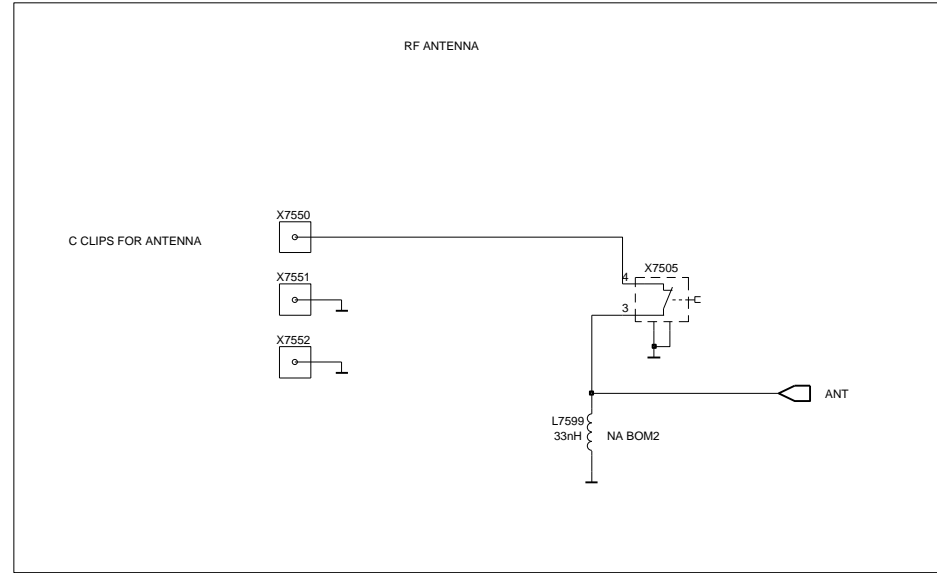
Name BB & RF

Vdd

Vbat

RFC10

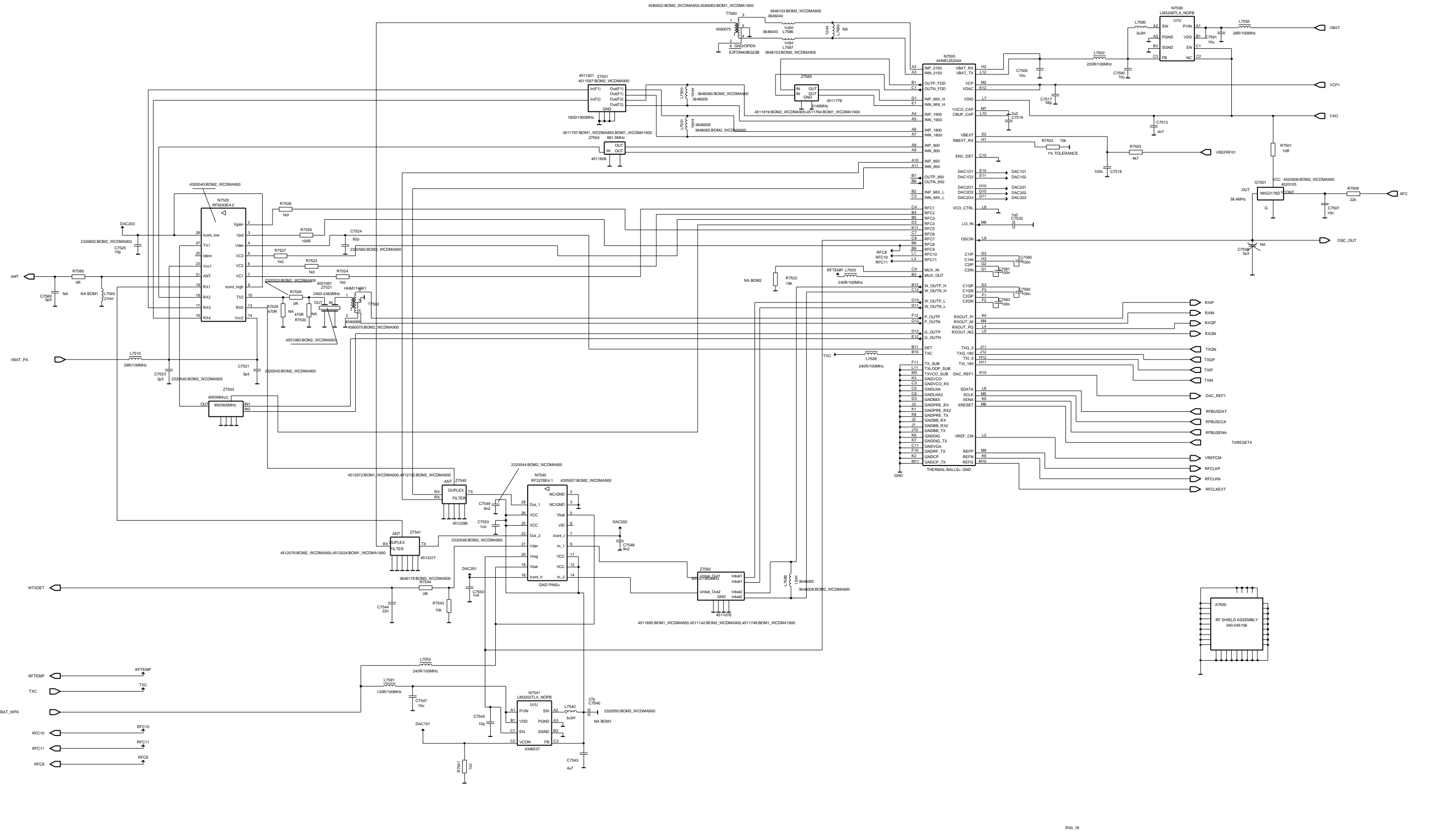
RFC11



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Name RF EXT

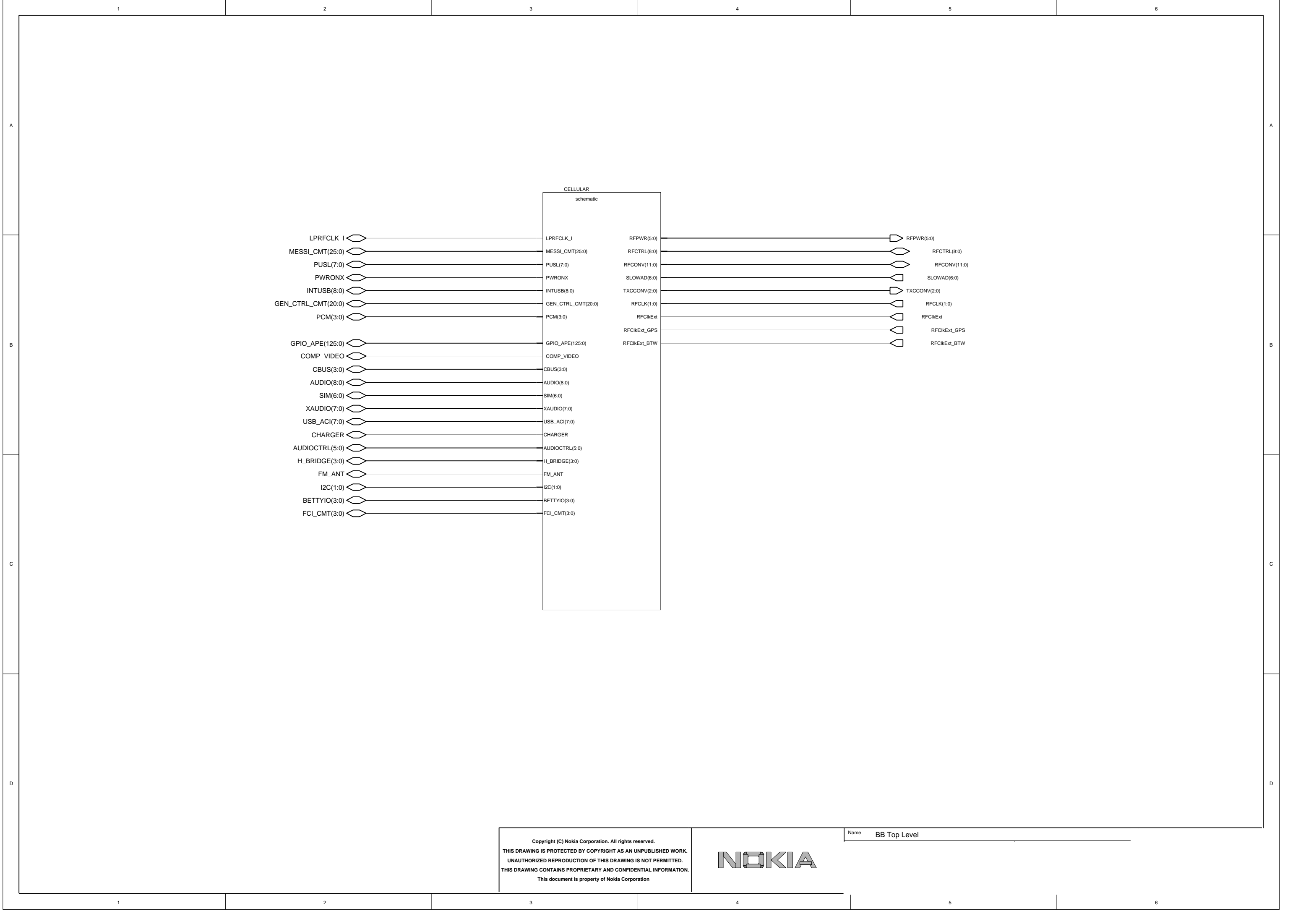


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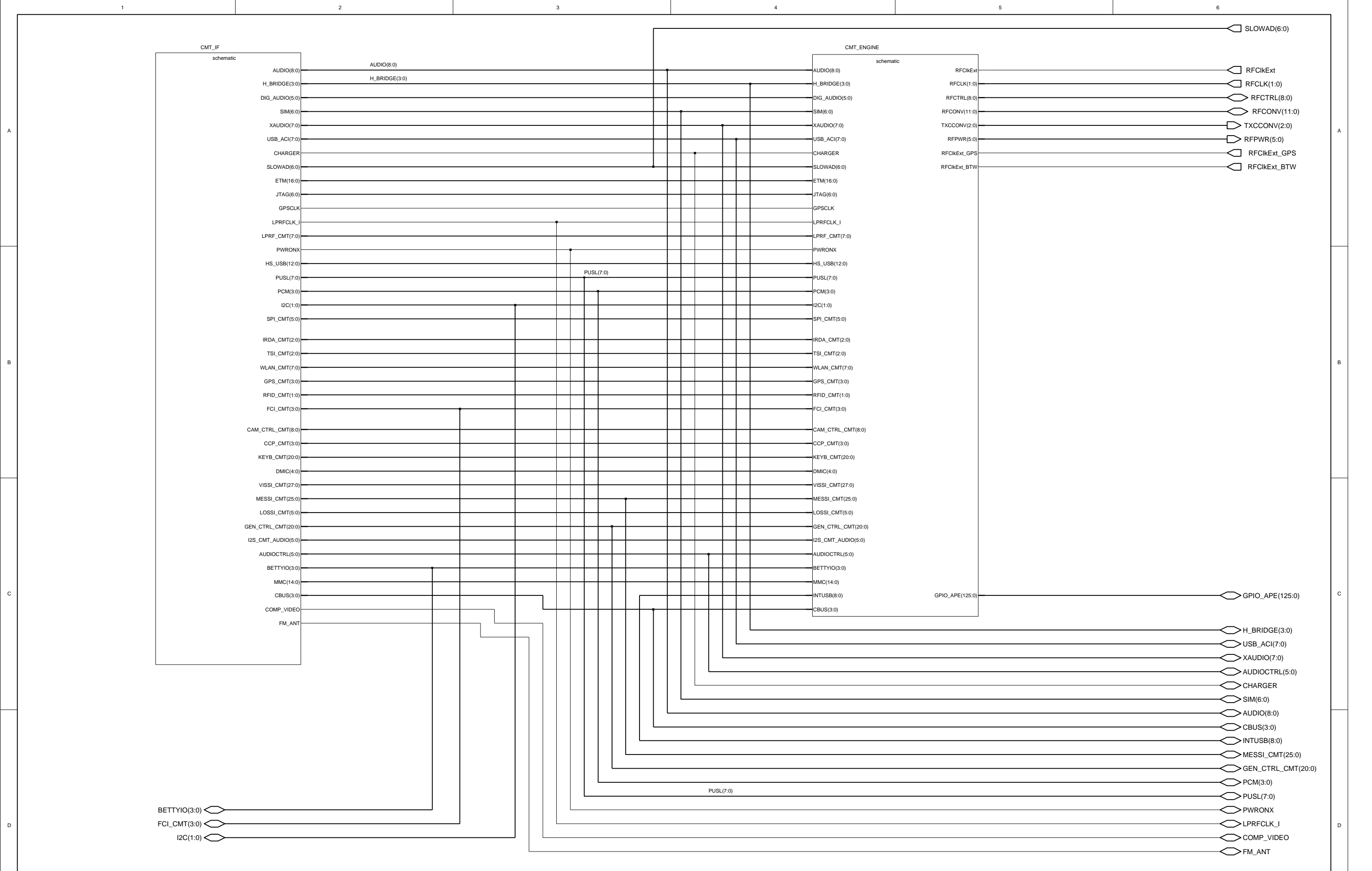
R50_18



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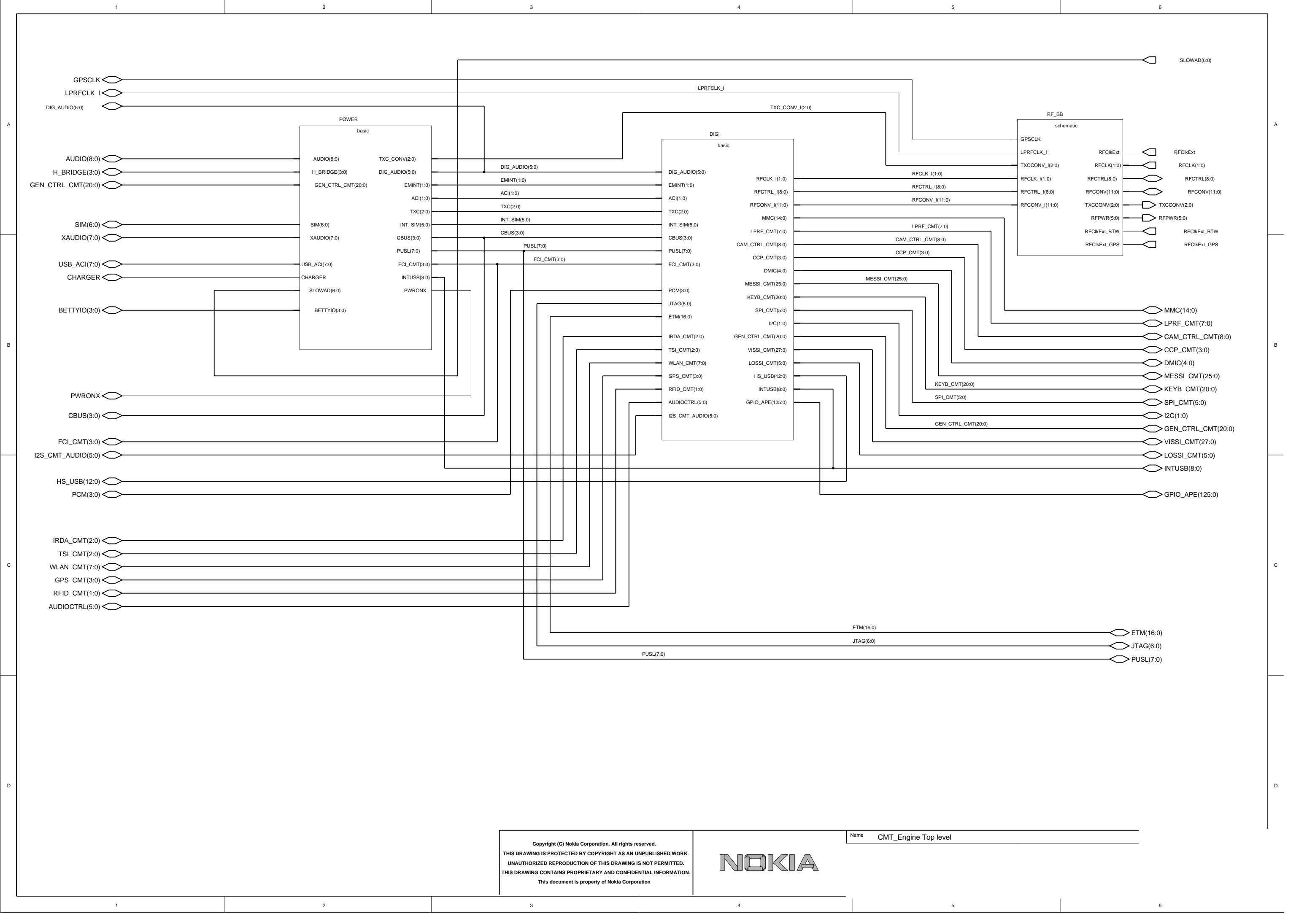
Name BB Top Level



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Name Cellular Top Level



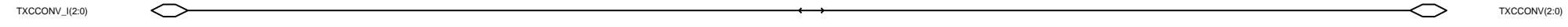
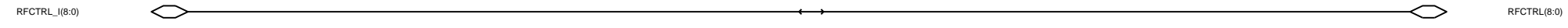
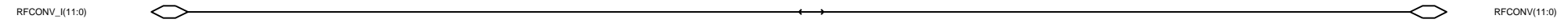
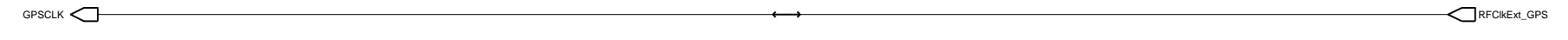
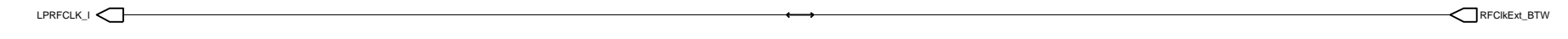
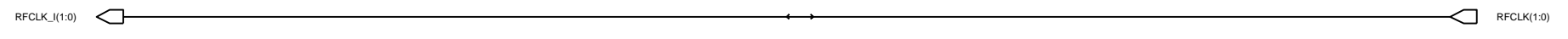
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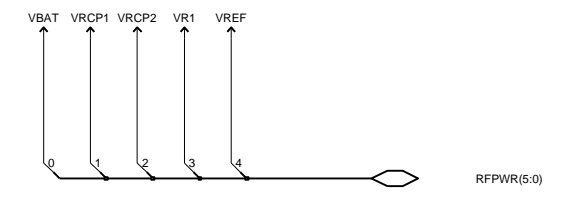
Name CMT_Engine Top level

CBB5X

TOP SHEET



VRCP2 not needed.

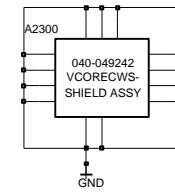
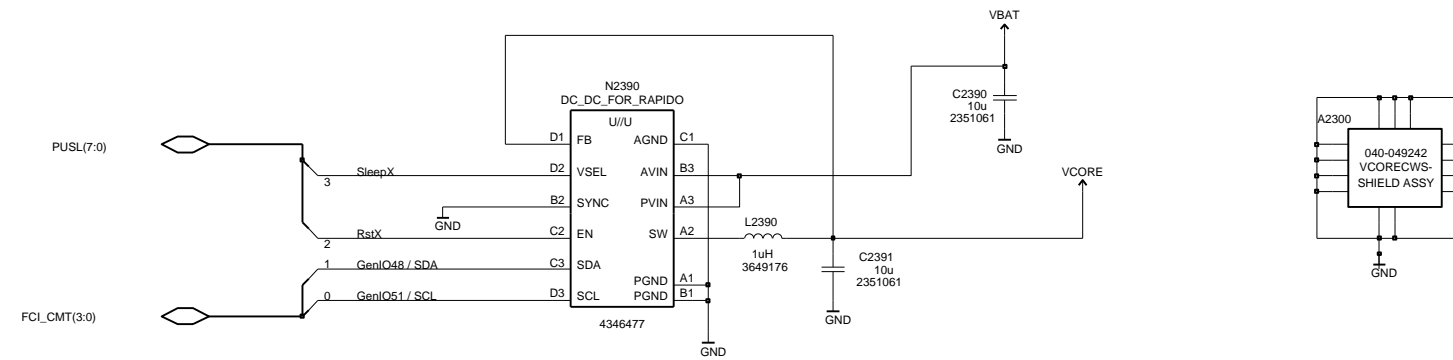


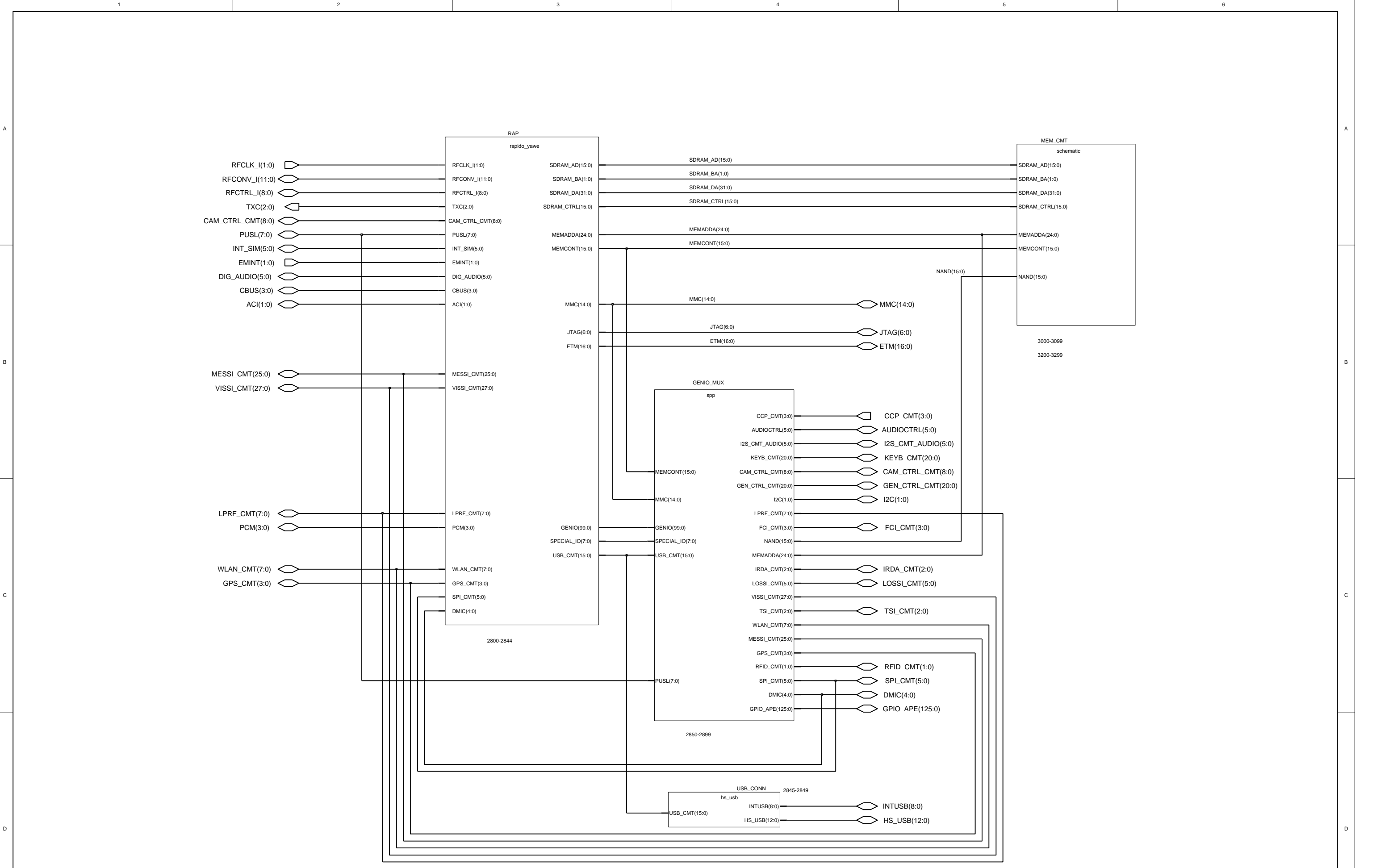
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Name RF IF

NOTE! SDA and SCL lines should include 10-47kOhm pull up resistors. Resistors value is dependent on number of I2C slaves

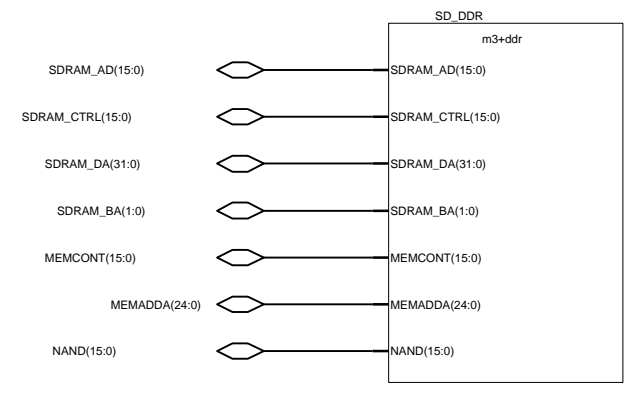




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Name CMT SUBSYSTEM



MEMCONT(15:0)

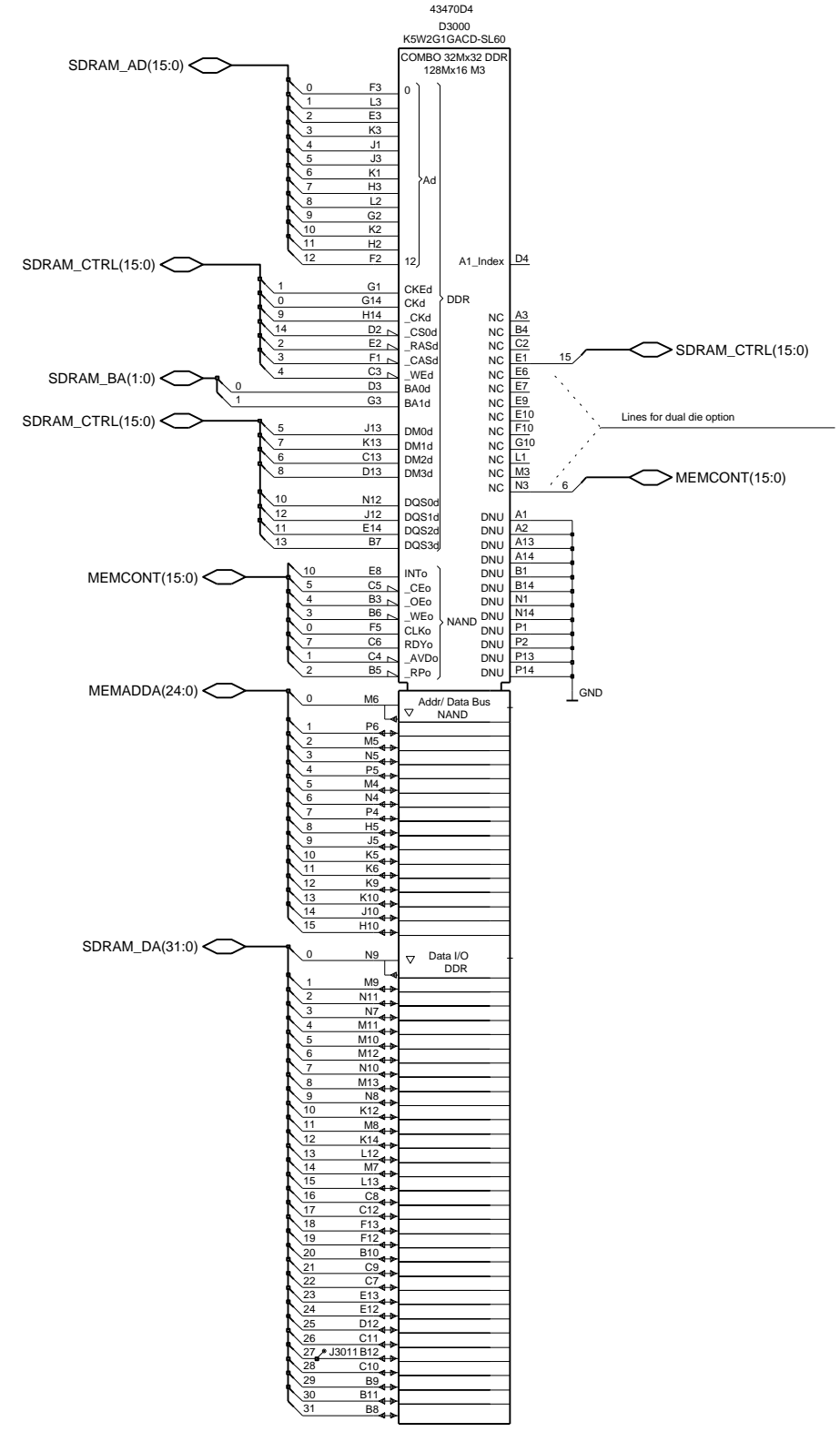
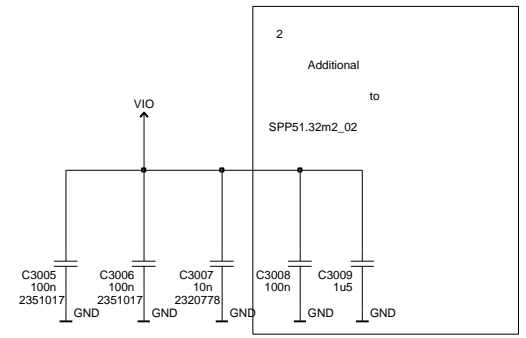
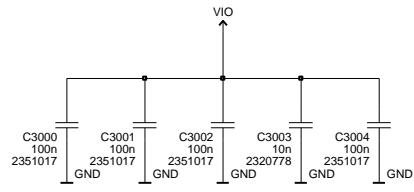
MEMADDA(24:0)

NAND(15:0)

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Name CMT Memories



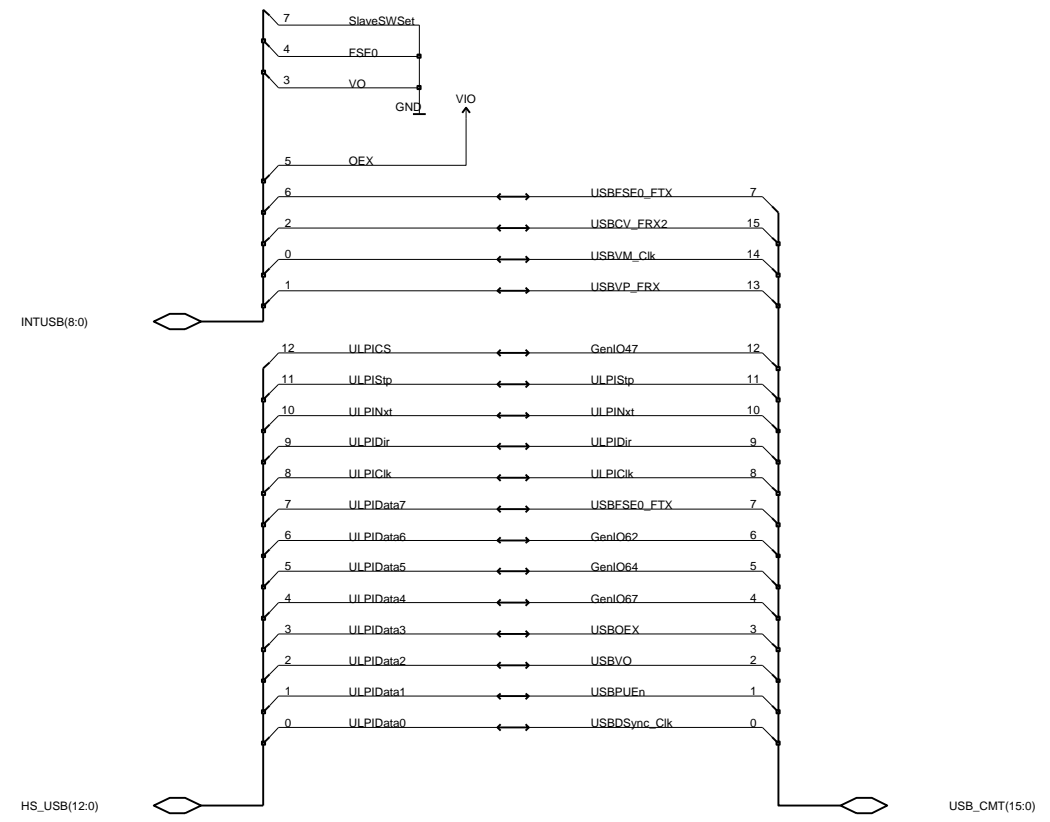
A11,D1,G12,H1,M2,P11= VIO
 A7,A8,B13,C14,G13,H13,M14,N13,P7,P8= VIO
 A5,E5= VIO
 K7,N2= VIO
 A6,A9,A12,D14,F14,J14,L14,N6,P9,P12= GND
 A10,C1,H12,J2,M1,P10= GND
 A4,B2,G5,K8,P3= GND

NAND(15:0)

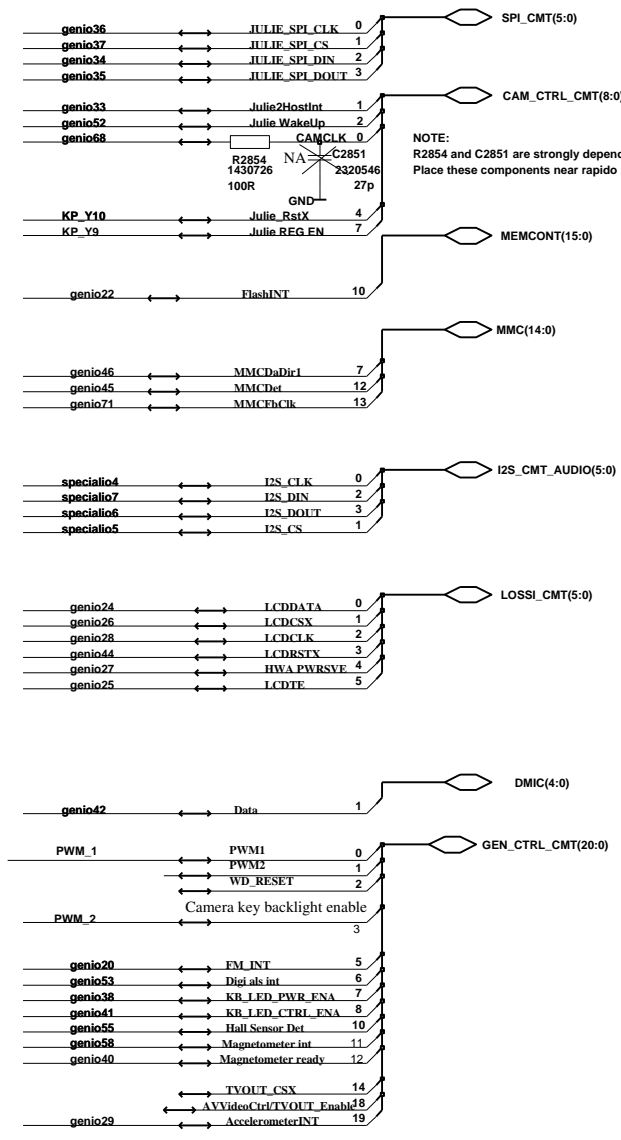
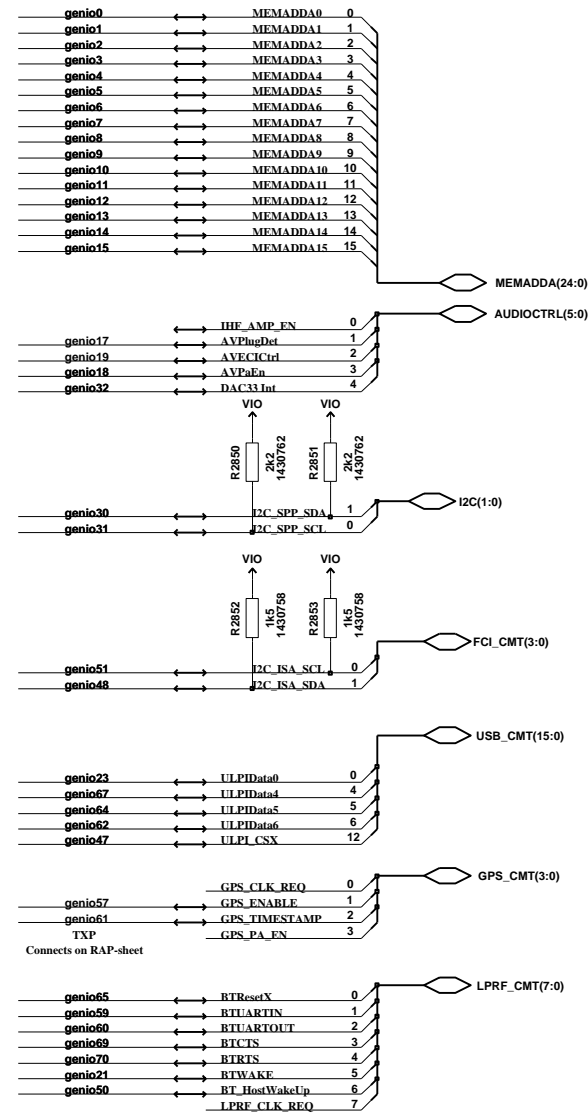
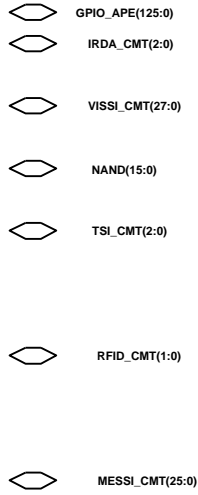
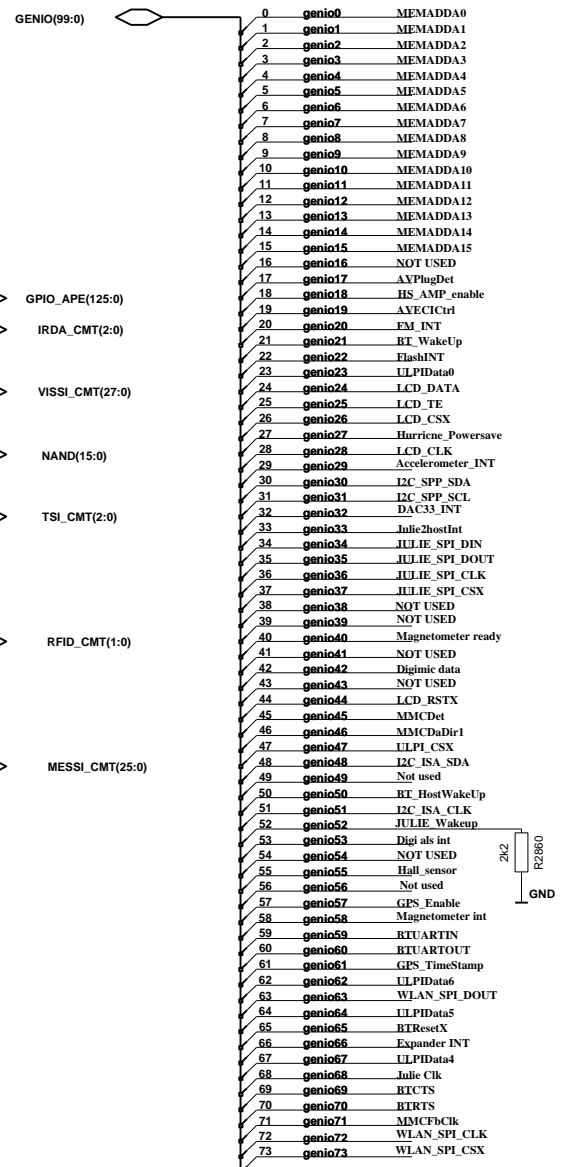
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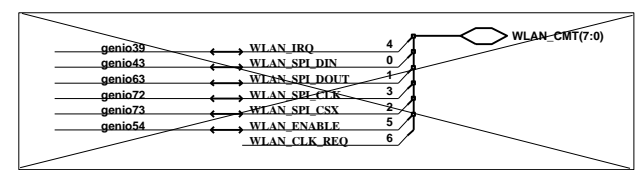
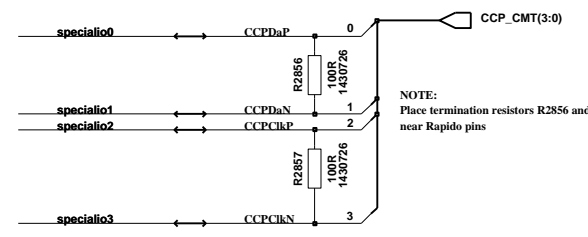
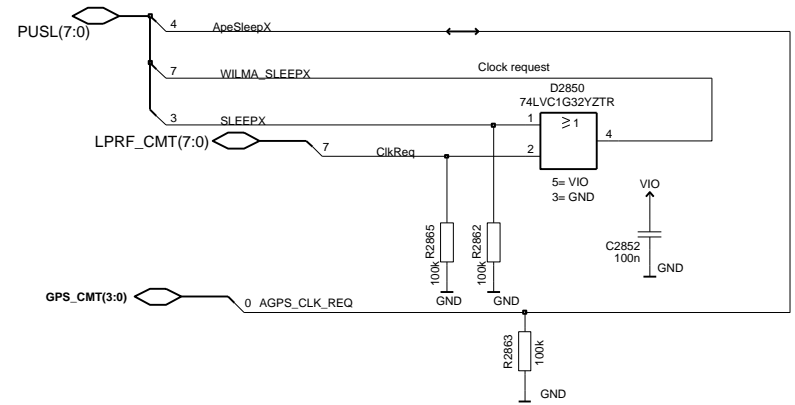
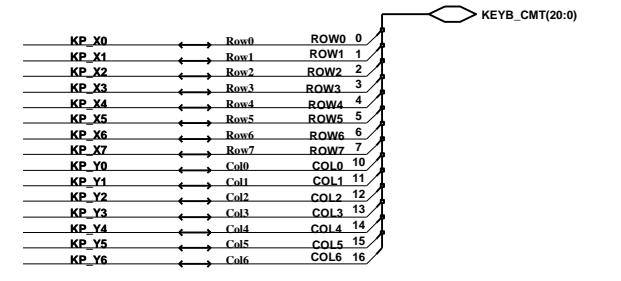
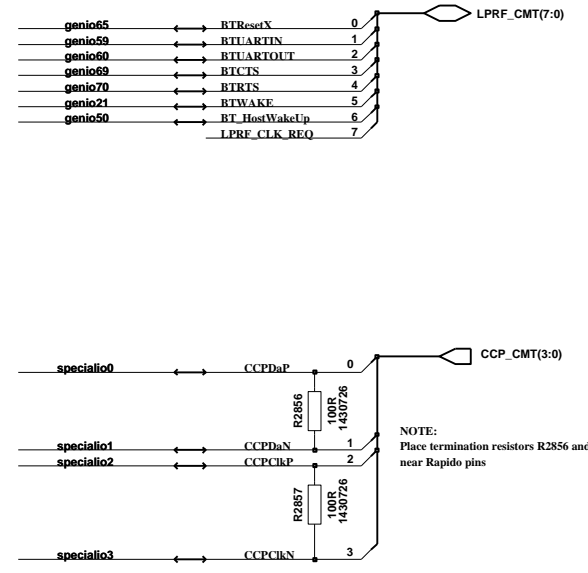
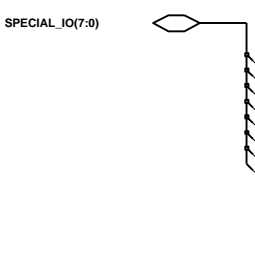
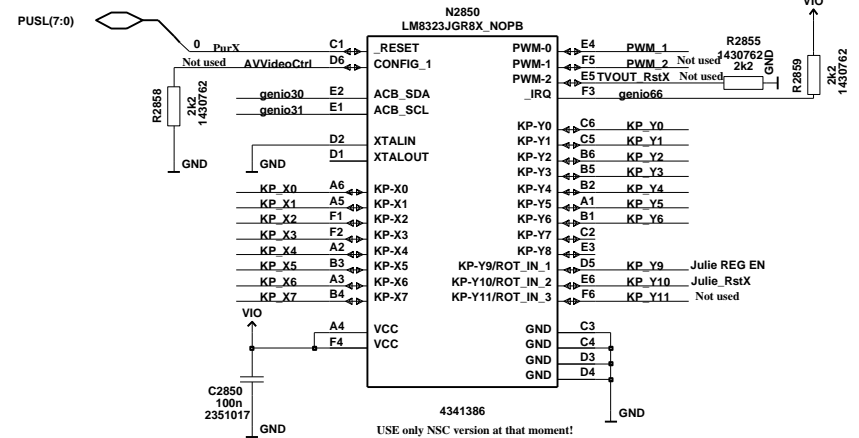
Name Combo memory M3 16 1Gb + DDR 32 512Mb



Blue colors are not used in Polaris



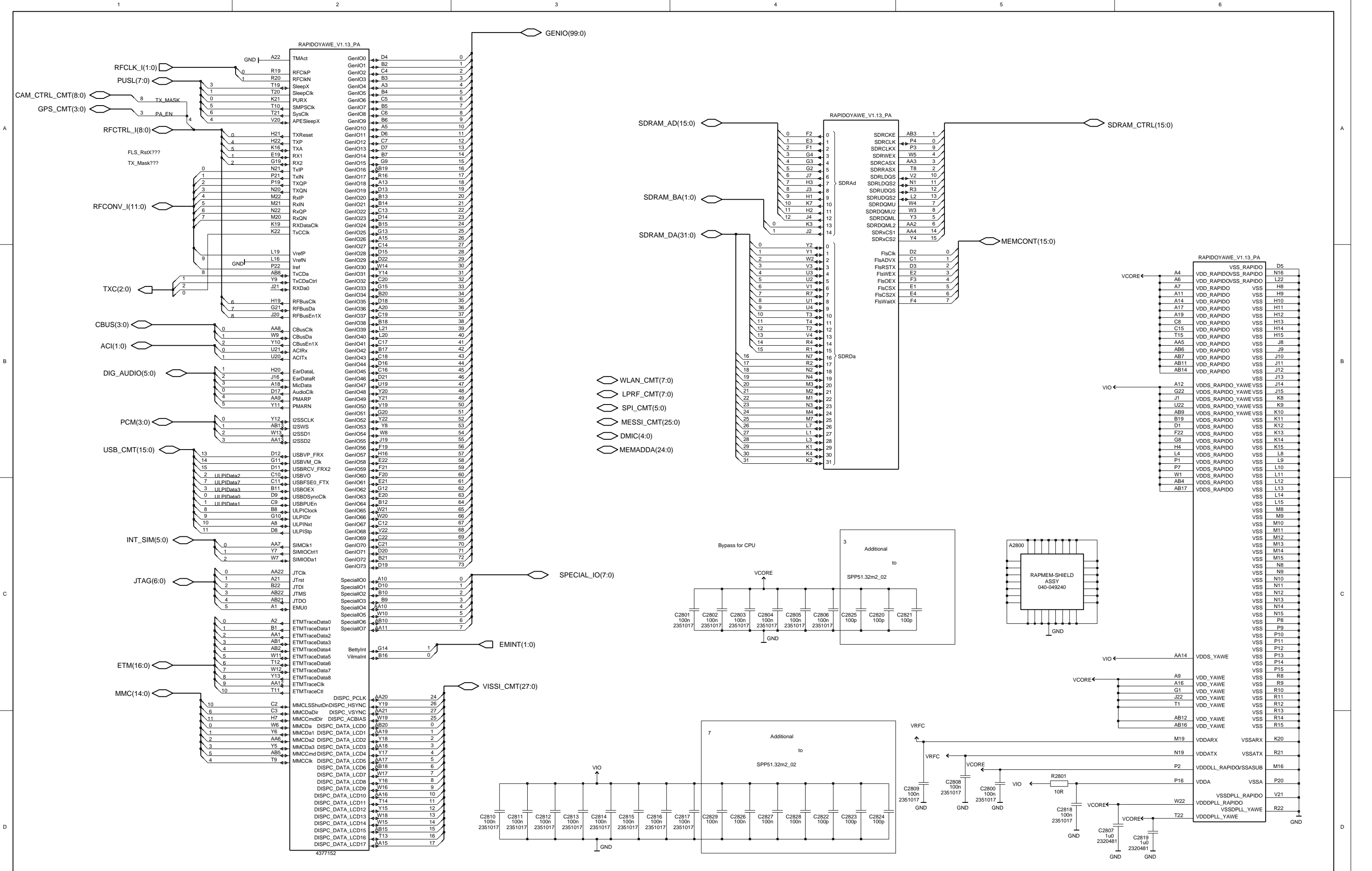
I/O EXPANDER



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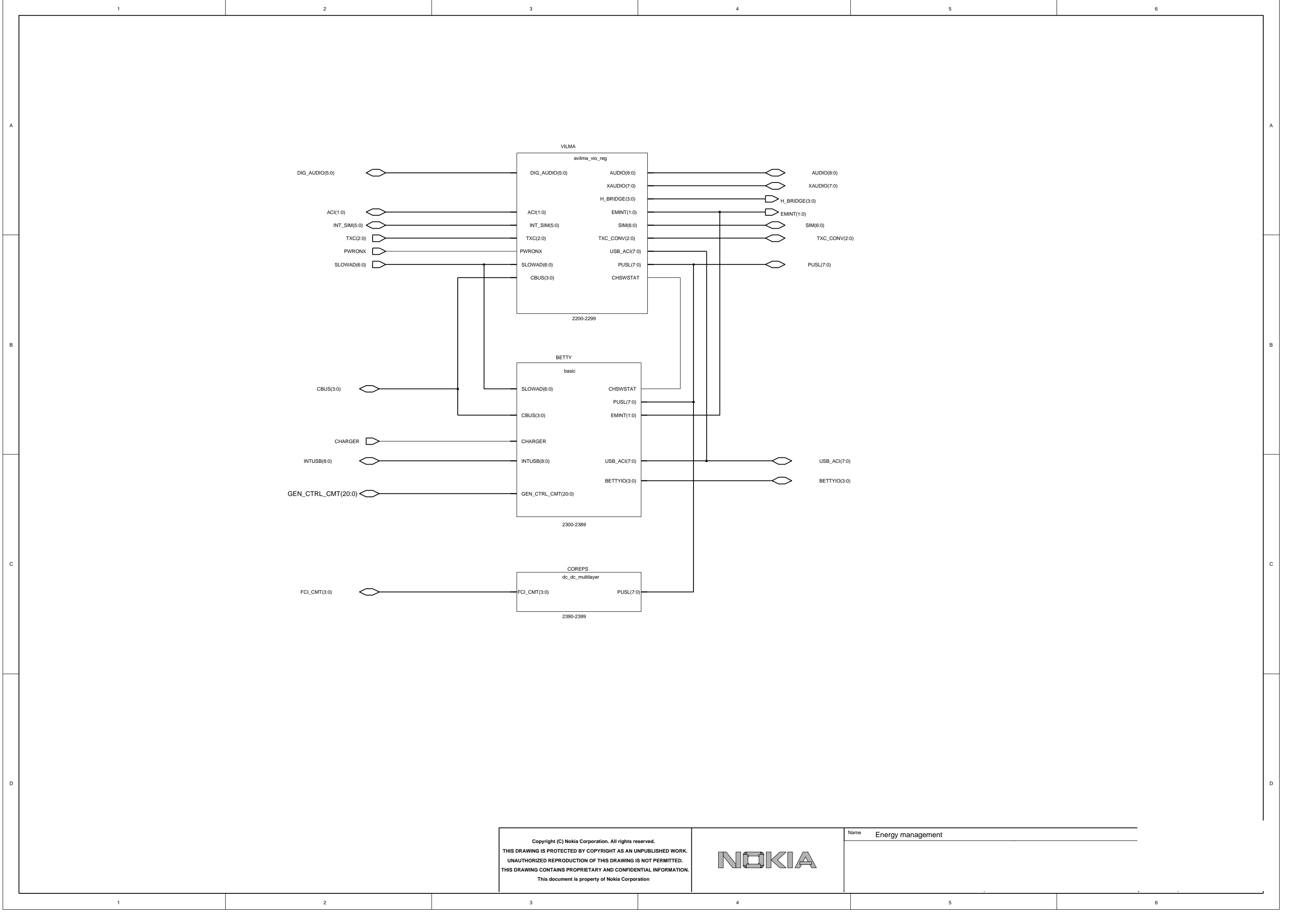
Name GenIO muxing (SPP51.32)



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Name RAPIDO YAWE



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Name Energy management

1

2

3

4

5

6

A

A

B

B

C

C

D

D

1

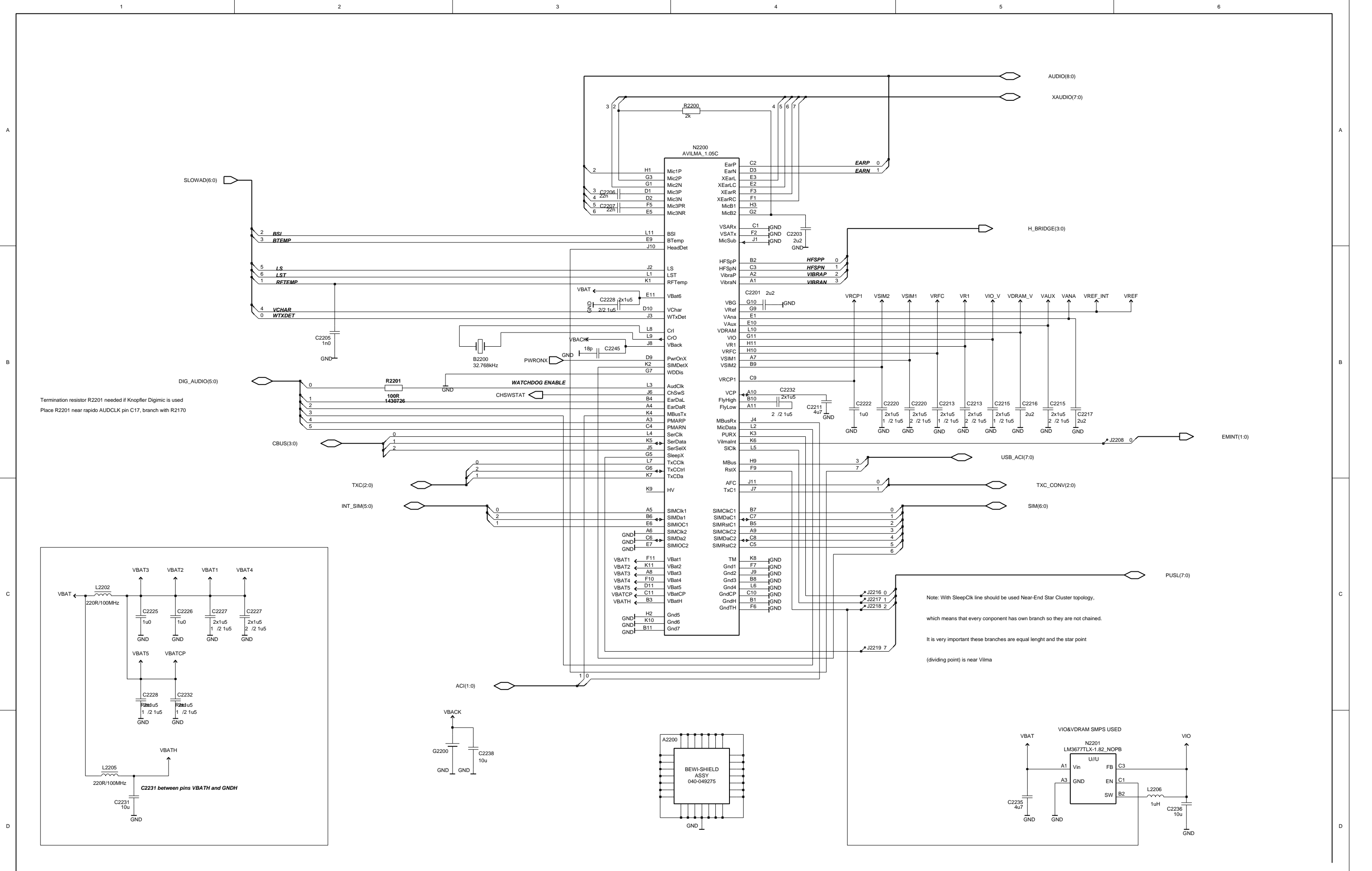
2

3

4

5

6



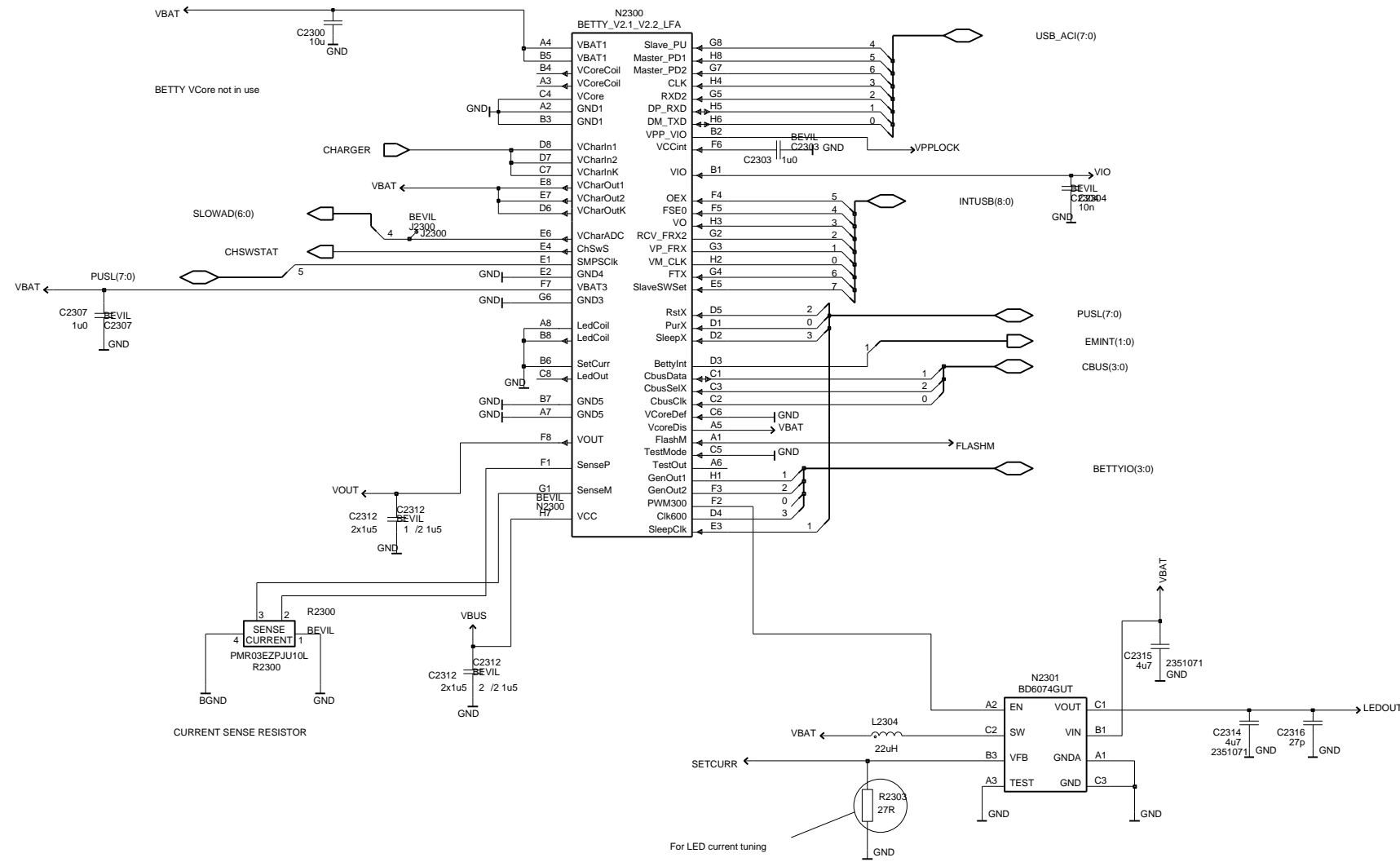
Termination resistor R2201 needed if Knopfler Digimic is used
Place R2201 near rapido AUDCLK pin C17, branch with R2170

Note: With SleepClk line should be used Near-End Star Cluster topology,
which means that every component has own branch so they are not chained.
It is very important these branches are equal length and the star point
(dividing point) is near Vilma

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Name AVILMA + External Vio SMPS

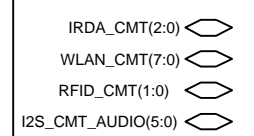
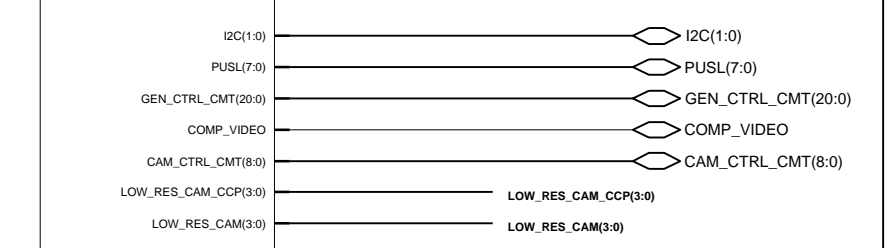
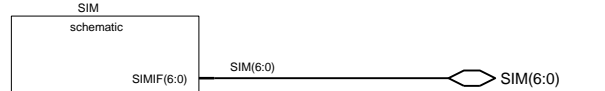
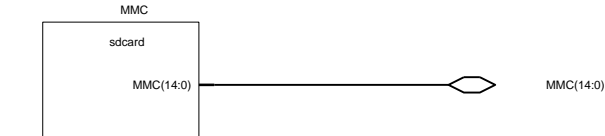
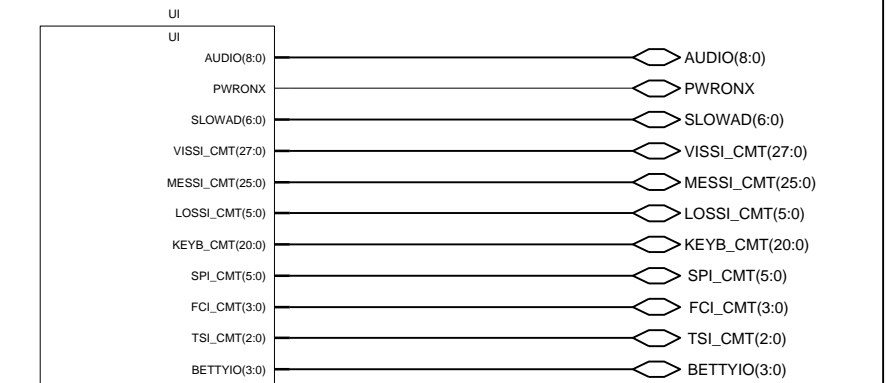
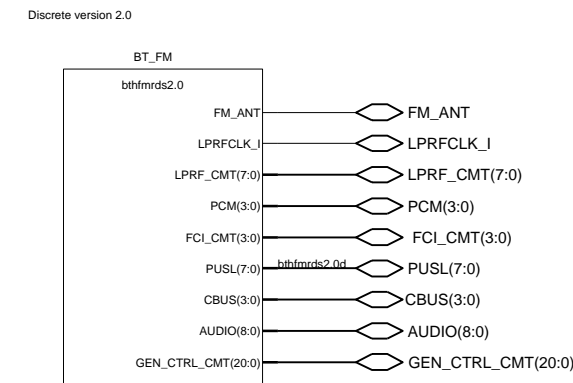
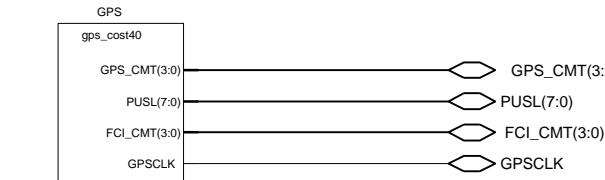
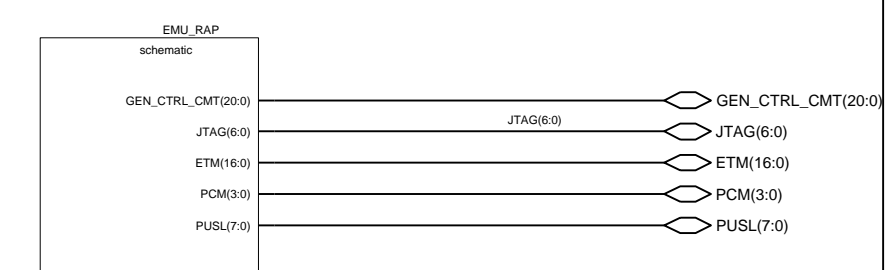
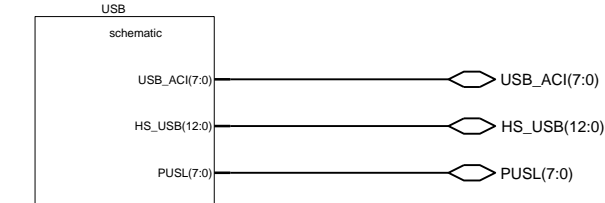
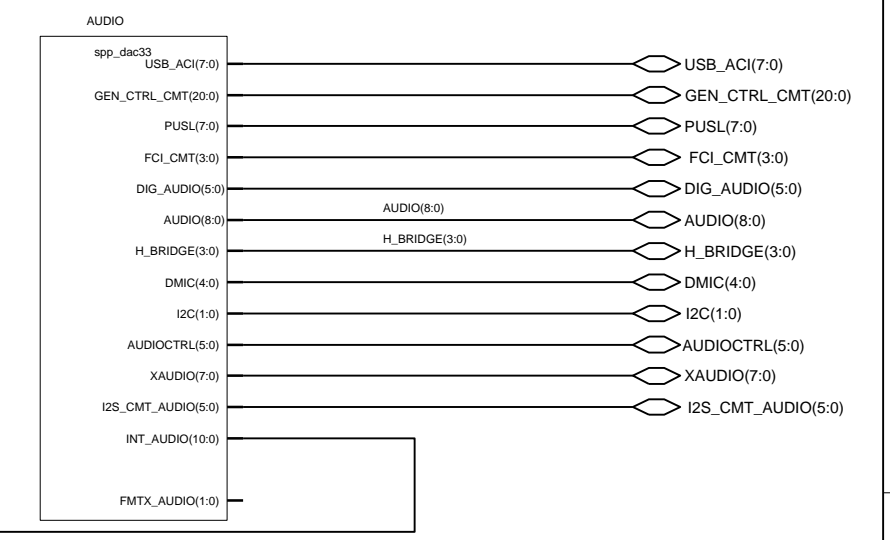
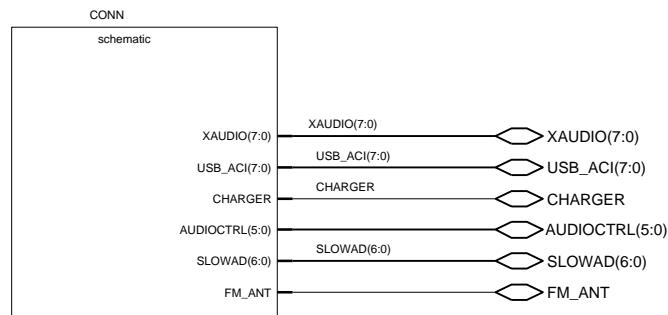
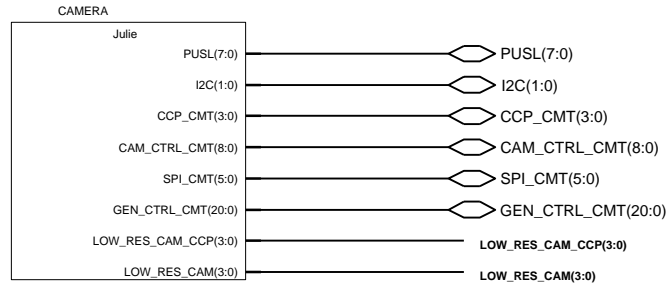
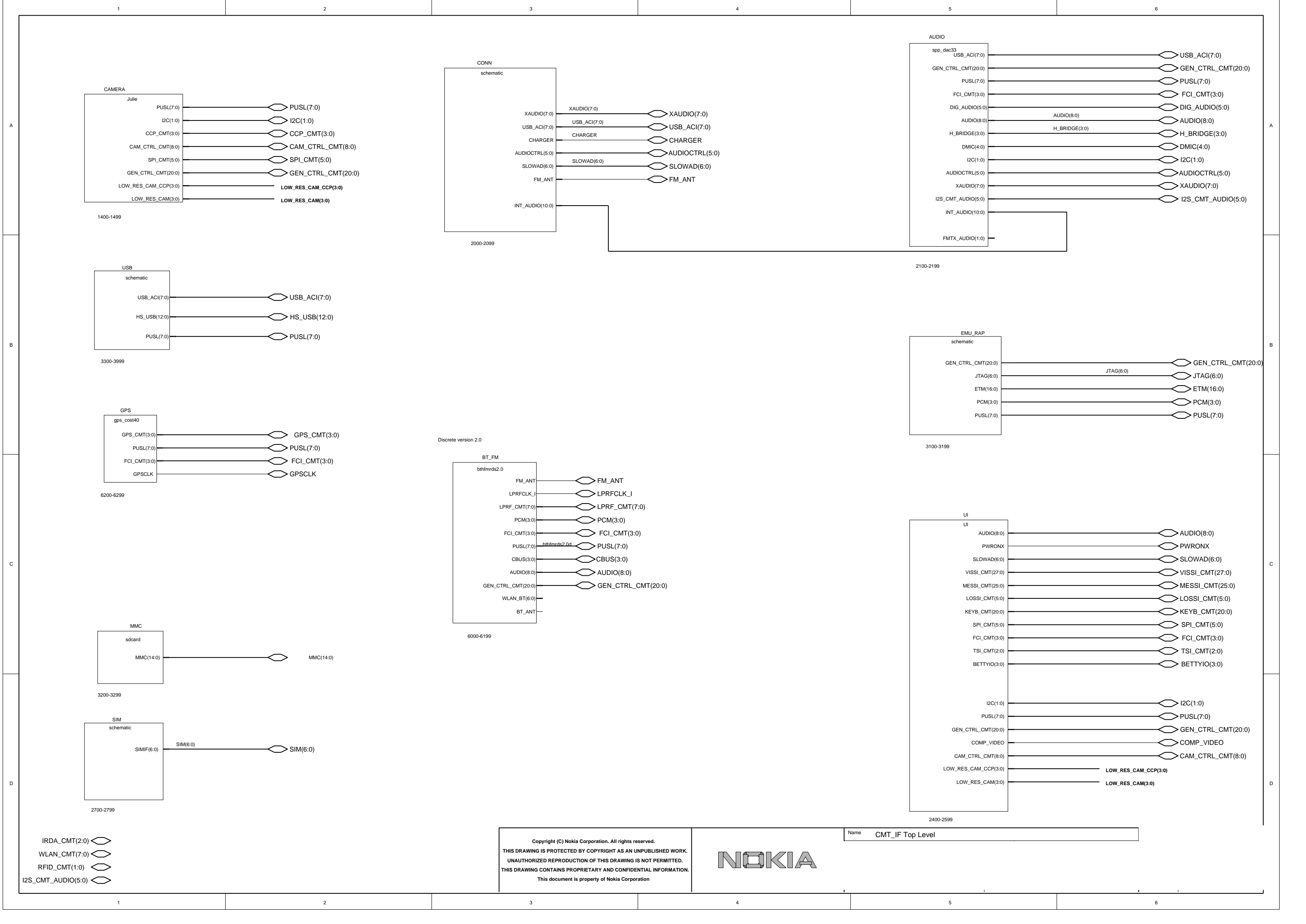


GEN_CTRL_CMT(20:0)

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Name Betty

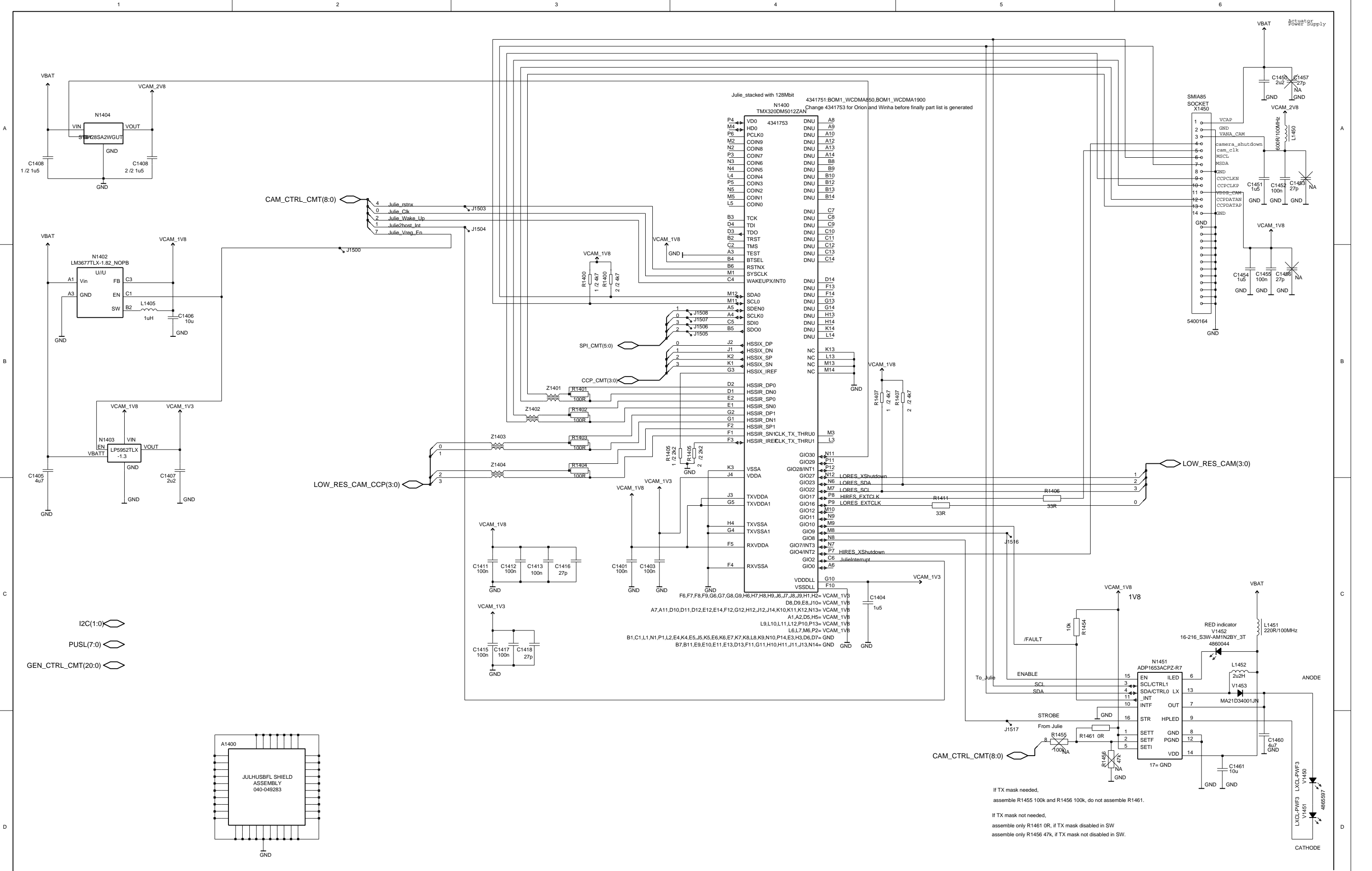
NOKIA



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Name CMT_IF Top Level



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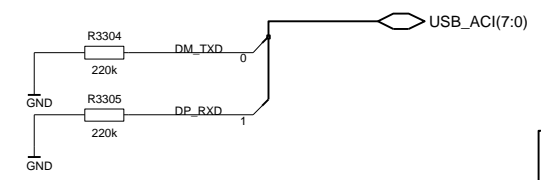
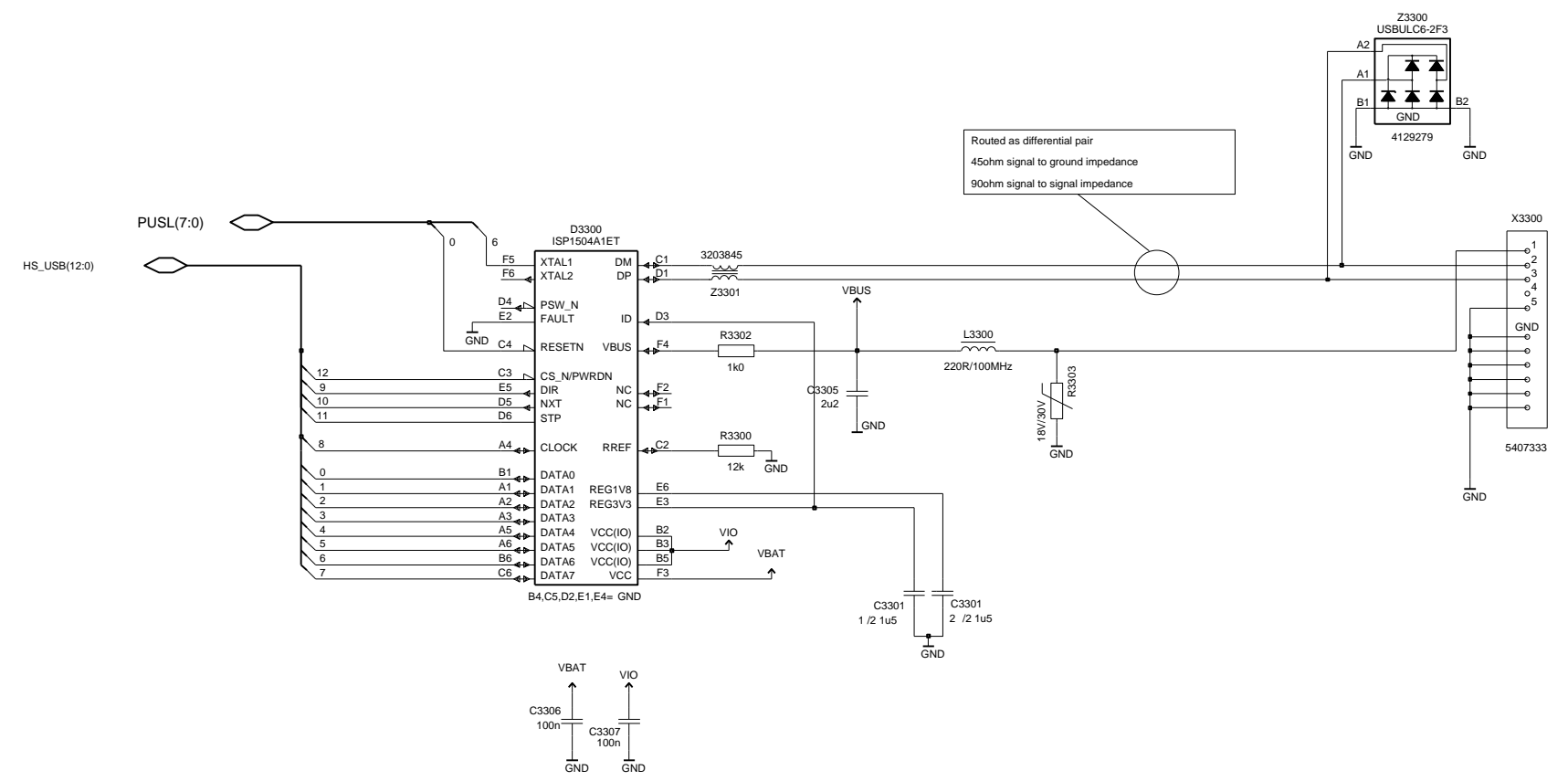
Name Camera sheet Julie

If TX mask needed,
 assemble R1455 100k and R1456 100k, do not assemble R1461.

If TX mask not needed,
 assemble only R1461 0R, if TX mask disabled in SW
 assemble only R1456 47k, if TX mask not disabled in SW.

LXCL-PWF3 LXCL-PWF3
 V1451 V1451
 4865597 4865597

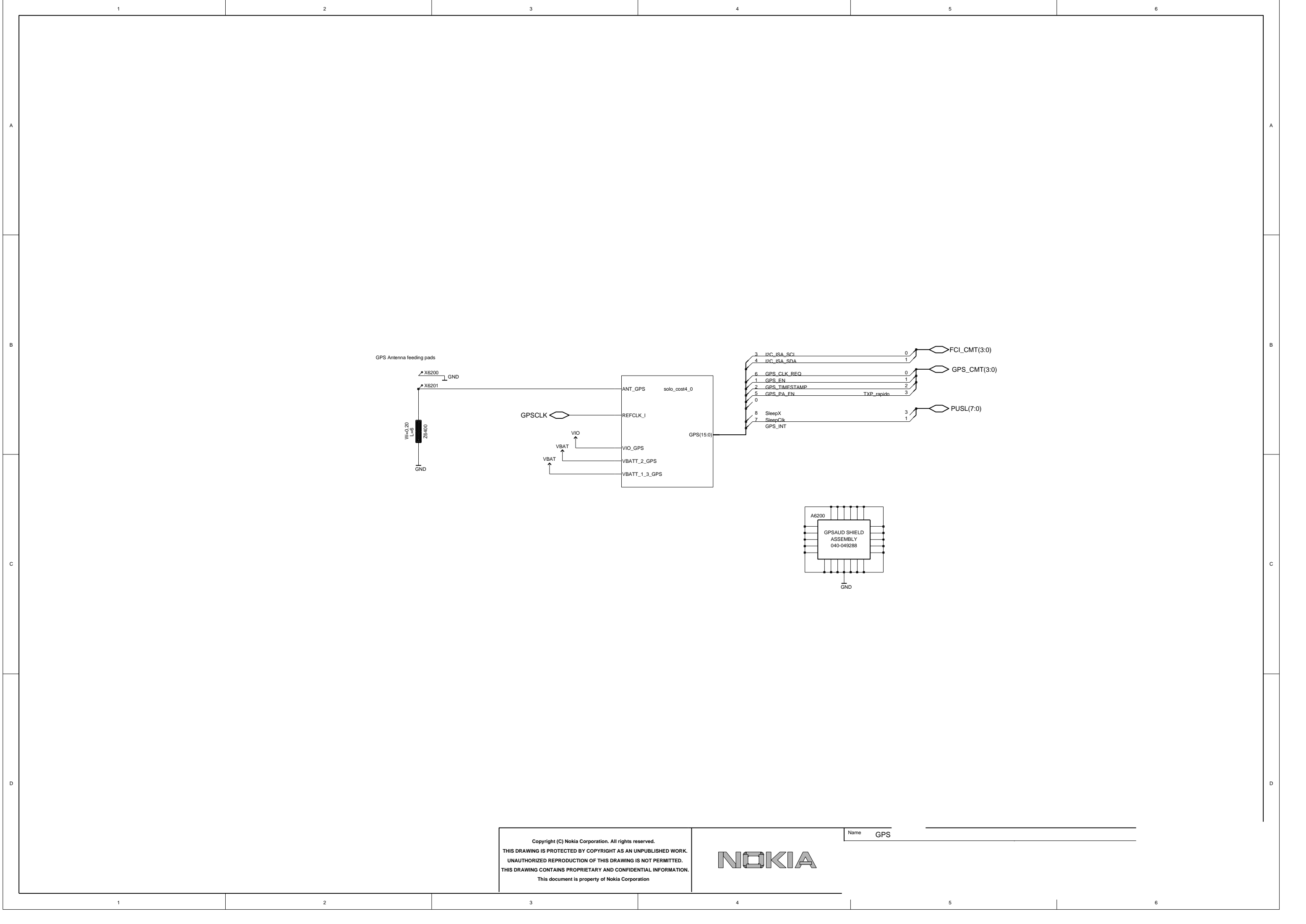
THIS SETUP IS DEVICE MODE ONLY!!!



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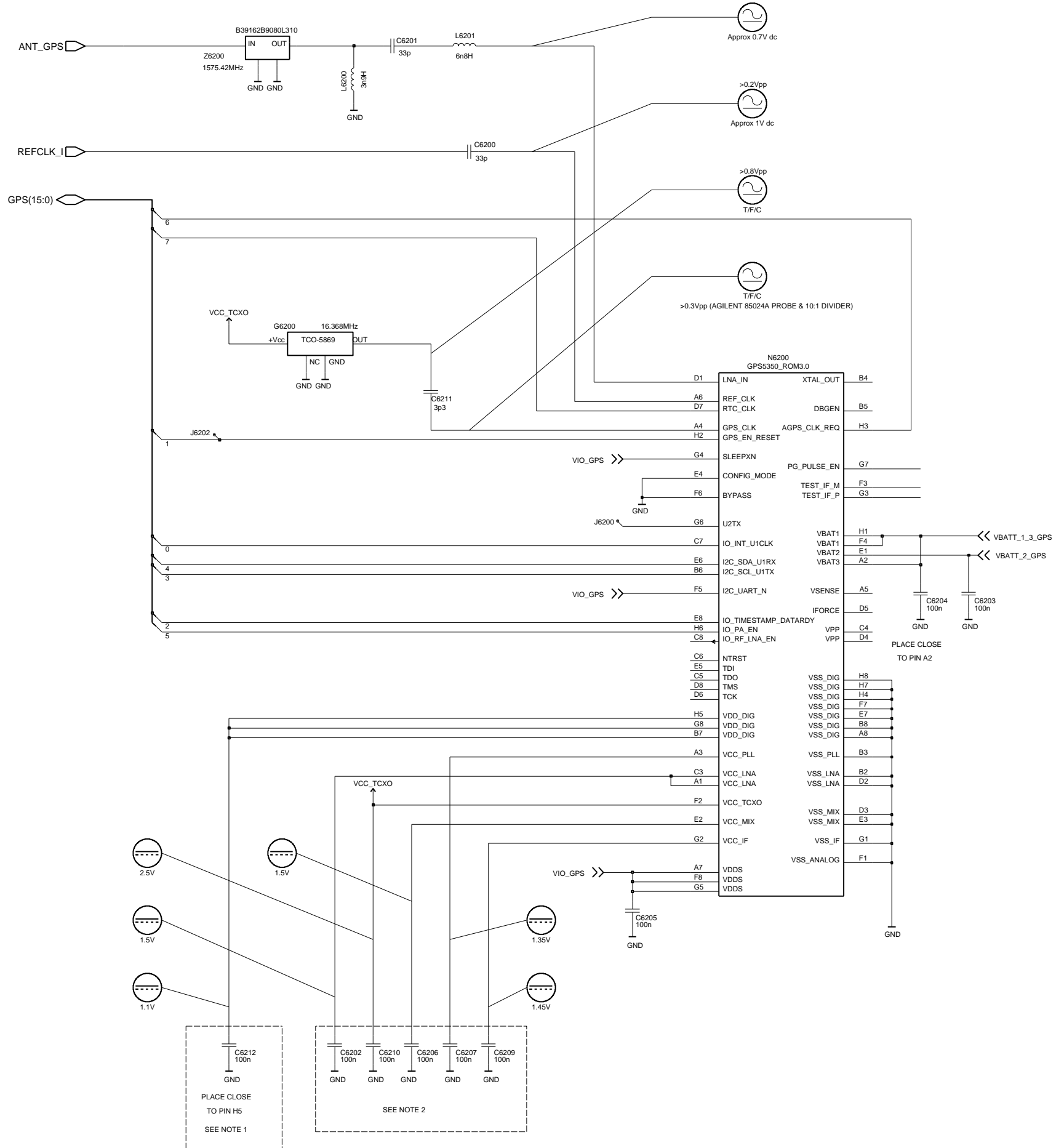
Name HS USB



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Name GPS

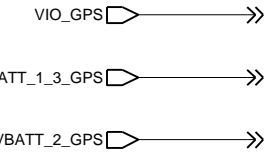


NOTES

- 1) TRACK INDUCTANCE FROM VDD_DIG, N6200-H5 TO C6212 MUST BE 1nH MAX.
- 2) TRACK INDUCTANCE FROM VDD_XXX, N6200 TO DECOUPLING CAPS MUST BE 1nH MAX.

PLACE CLOSE TO PIN H5
SEE NOTE 1

SEE NOTE 2

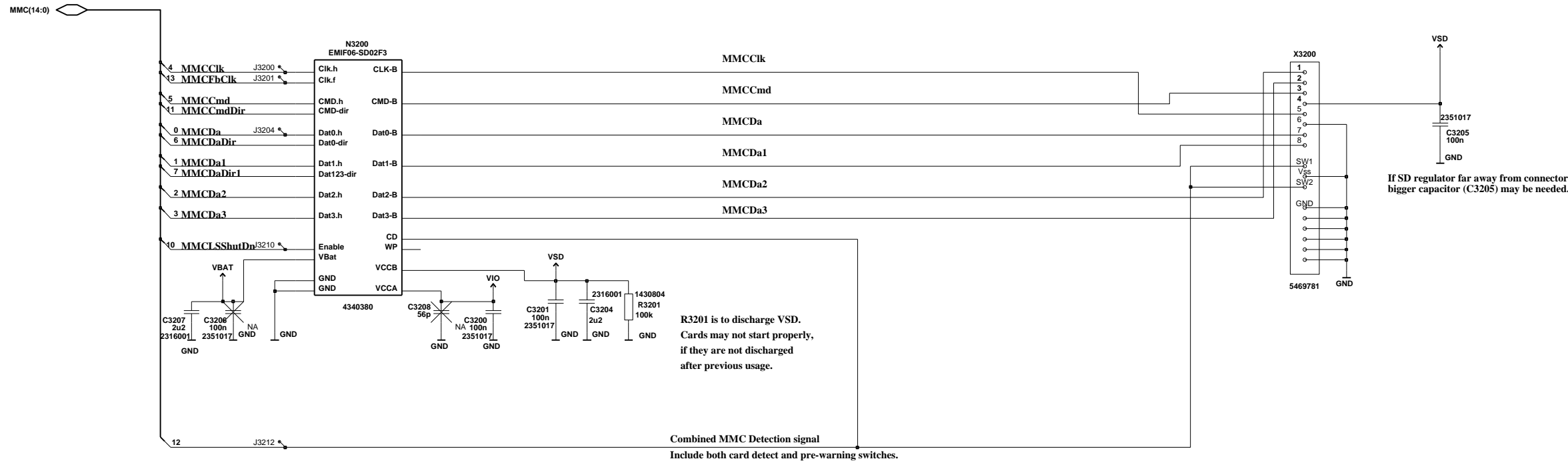


REF RANGE = 6200-6299

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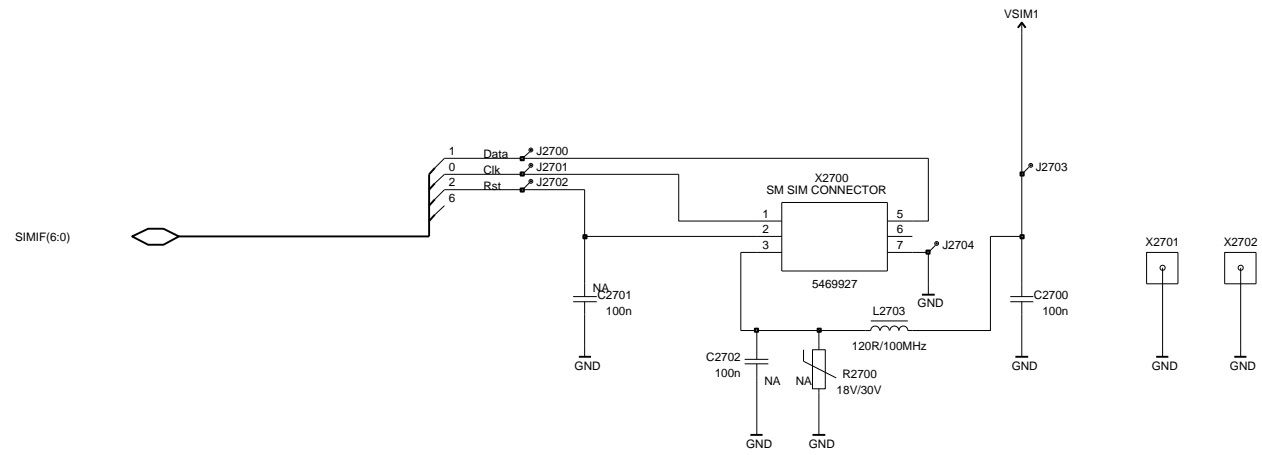
Name _____ 4.0 REFERENCE



Test pad	Needed	Optional
J3200 MMCCLK (Rapido vs. EMIF)	X	
J3201 MMCFbClk (Rapido vs EMIF)	X	
J3202 MMCCMD (Rapido vs EMIF)	X	
J3203 MMCCMDIR (Rapido vs EMIF)	X	
J3204 MMCDATA0 (Rapido vs EMIF)	X	
J3205 MMCDATADIR0 (Rapido vs EMIF)	X	
J3206 MMCDATA1 (Rapido vs EMIF)	X	
J3207 MMCDATADIR1 (Rapido vs EMIF)		X
J3208 MMCDATA2 (Rapido vs EMIF)	X	
J3209 MMCDATA3 (Rapido vs EMIF)	X	
J3210 MMCLSShutDn (Rapido vs EMIF)		X
J3212 MMC Detect	X	
J3213 MMCCLK (EMIF vs connector)	X	
J3214 MMCCMD (EMIF vs connector)	X	
J3215 MMCDATA0 (EMIF vs connector)	X	
J3216 MMCDATA1 (EMIF vs connector)		X
J3217 MMCDATA2 (EMIF vs connector)		X
J3218 MMCDATA3 (EMIF vs connector)		X

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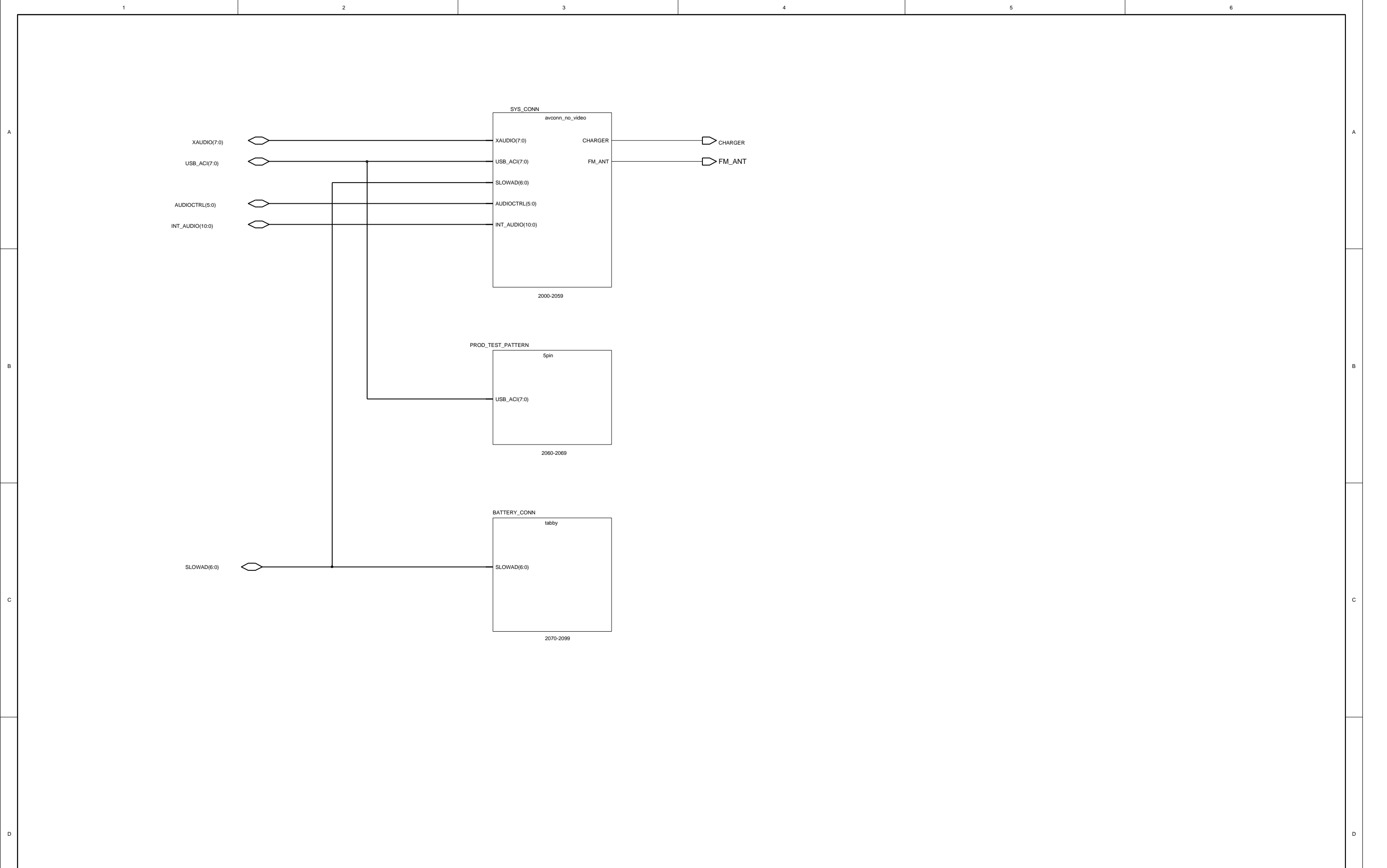
Name SD CARD IF



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Name SIM interface

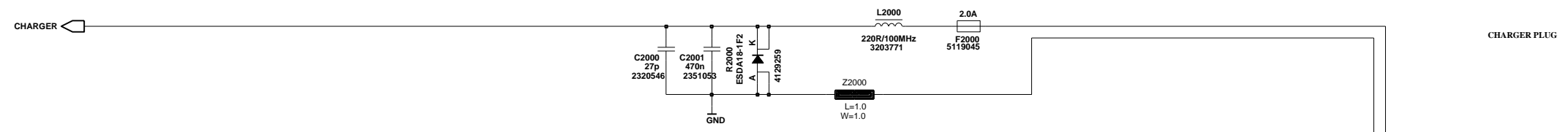


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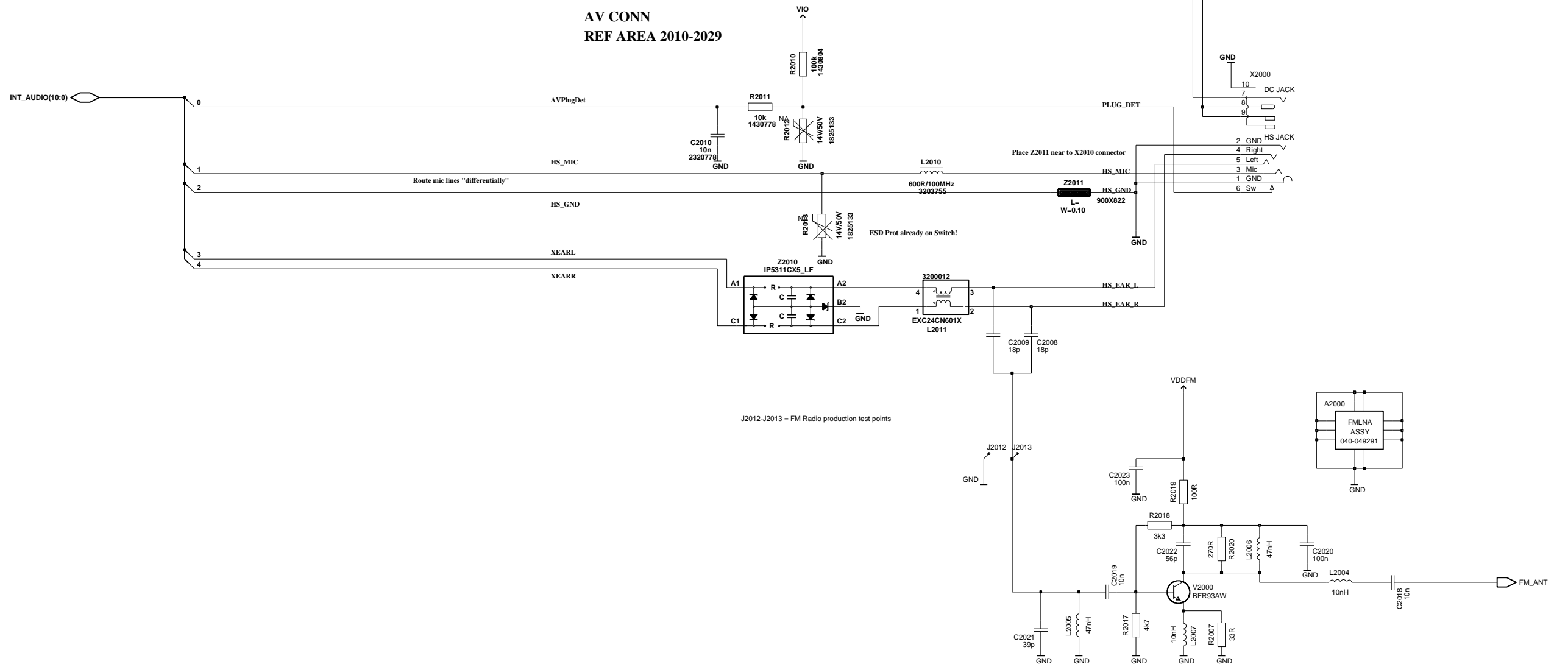


Name System and battery connector

CHARGER
REF AREA 2000-2009



AV CONN
REF AREA 2010-2029



- SLOWAD(6:0)
- XAUDIO(7:0)
- USB_ACI(7:0)
- AUDIOCTRL(5:0)

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Name AV connector, no video

1

2

3

4

5

6

A

A

B

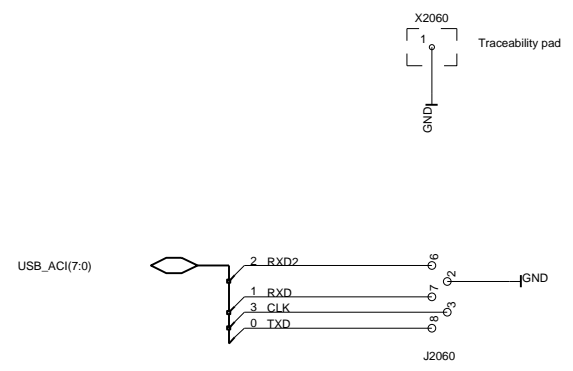
B

C

C

D

D



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Name Production test pad

1

2

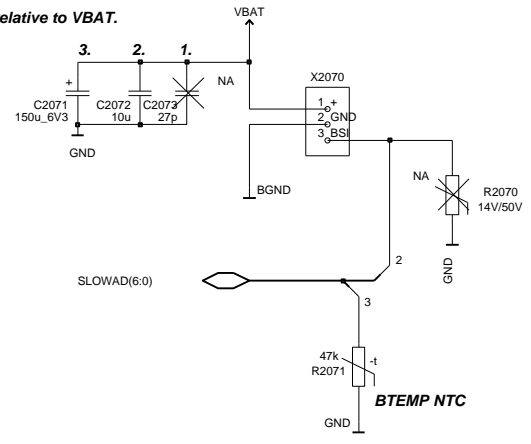
3

4

5

6




This order in layout relative to VBAT.

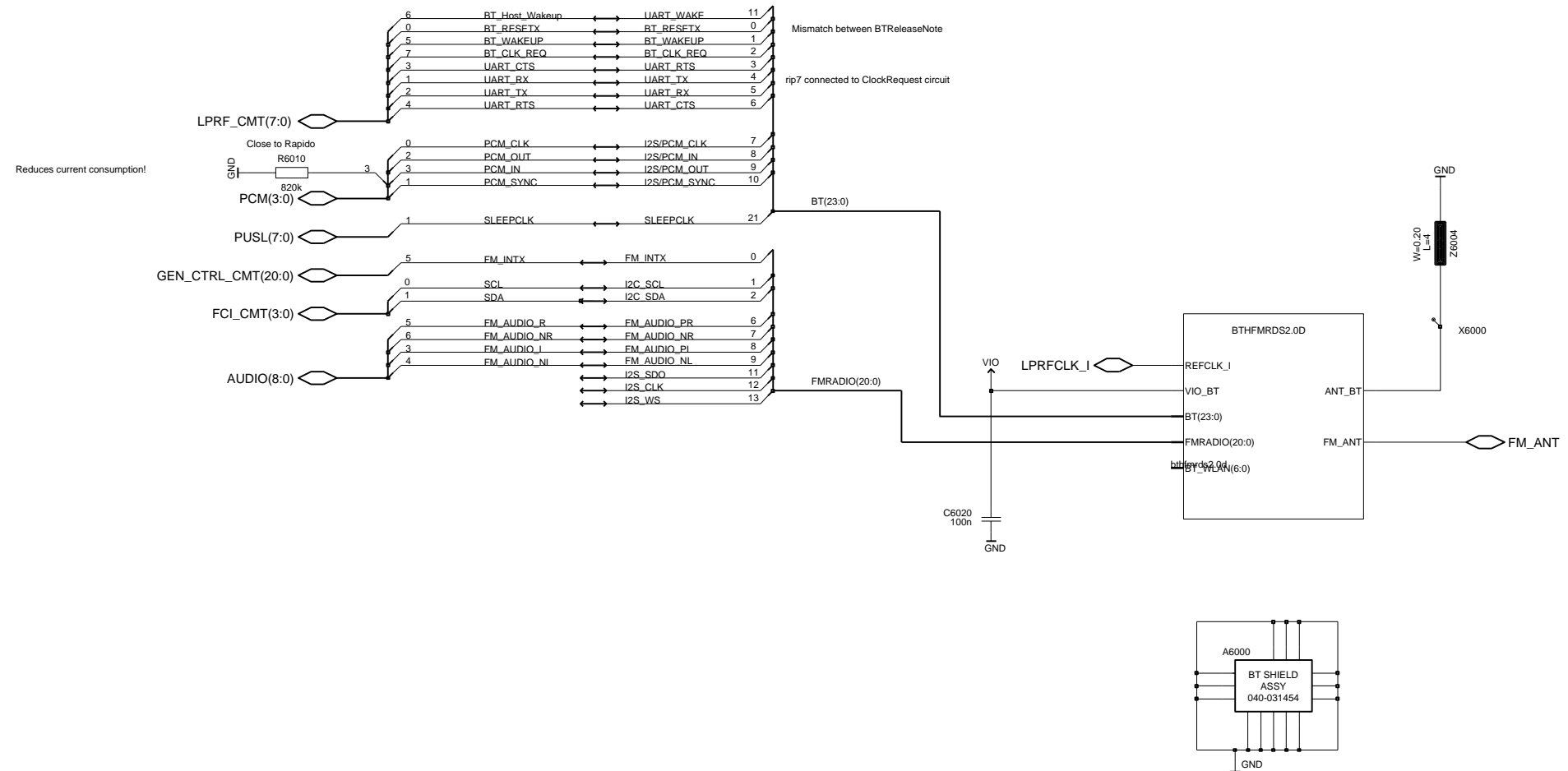


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Name Battery Connector

BT_ANT 
 WLAN_BT(6:0) 
 CBUS(3:0) 



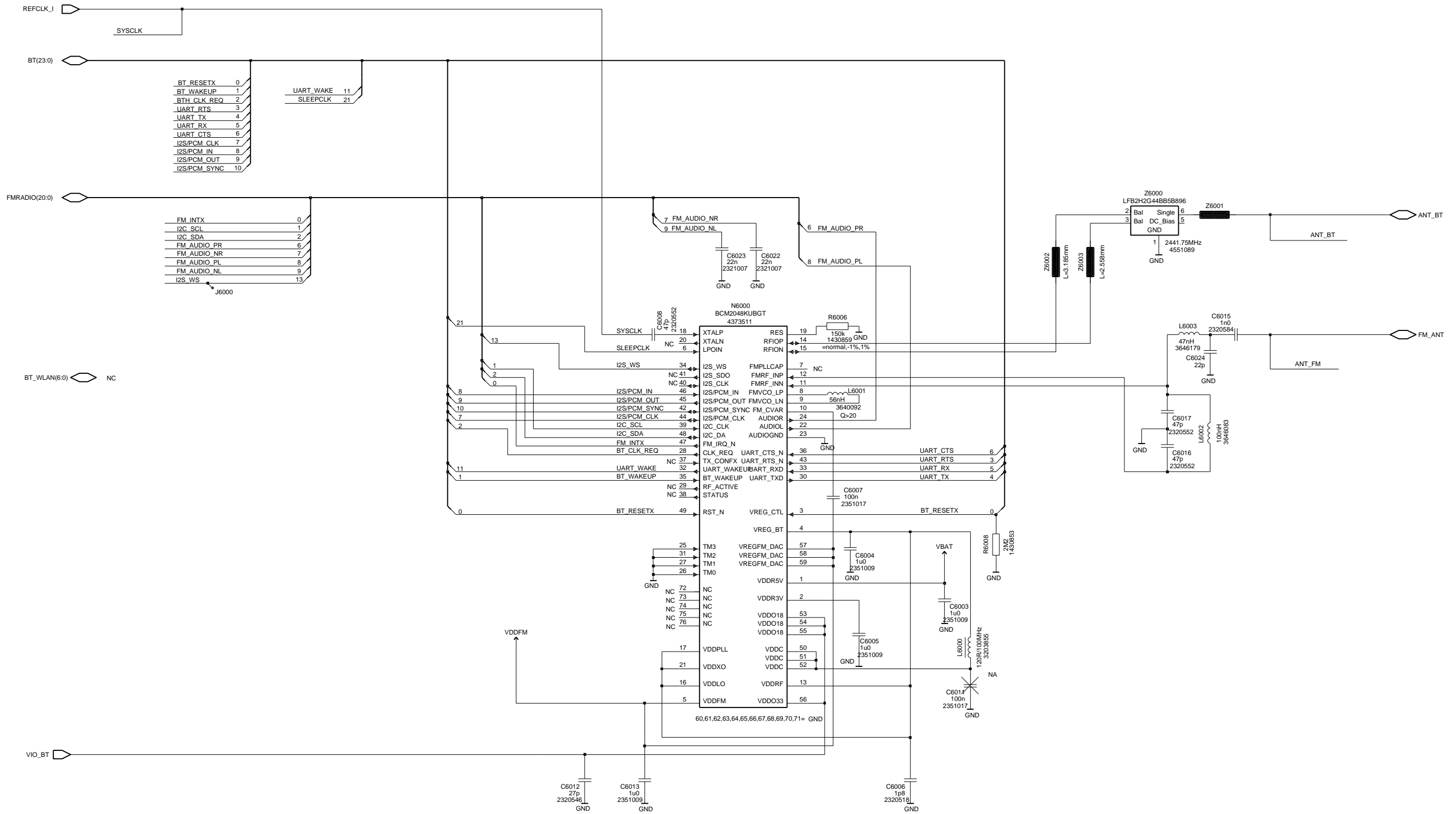
Test pad	Needed	Optional
J6000 BT_HOST_WAKEUP	X	
J6001 BT_RESETX	X	
J6002 BT_WAKEUP	X	
J6003 UART_CTS		X
J6004 UART_RX	X	
J6005 UART_TX	X	
J6006 UART_RTS		X
J6007 PCM_CLK	X	
J6008 PCM_OUT	X	
J6009 BT_WLAN_TX_CONF	X	
J6010 BT_WLAN_RF_ACTIVE	X	
J6011 BT_WLAN_STATUS	X	
J6012 BT_WLAN_FREQ		X

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Name Bluetooth - FM RDS

BLUETOOTH & FM RADIO DISCRETE



Notes.

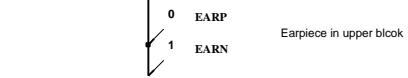
- 1) 3k3 Pull-up Resistors are required on I2C_SCL & I2C_SDA

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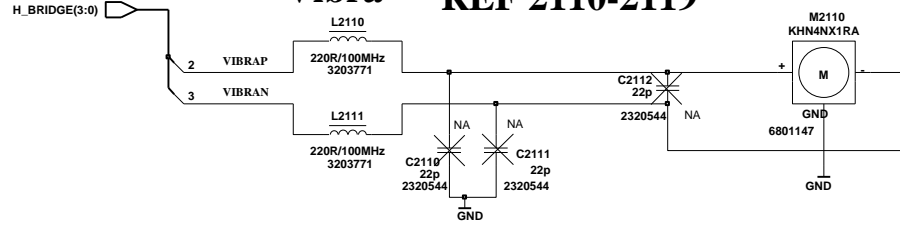


Name BTFM RDS 2.0D (2+4+2)

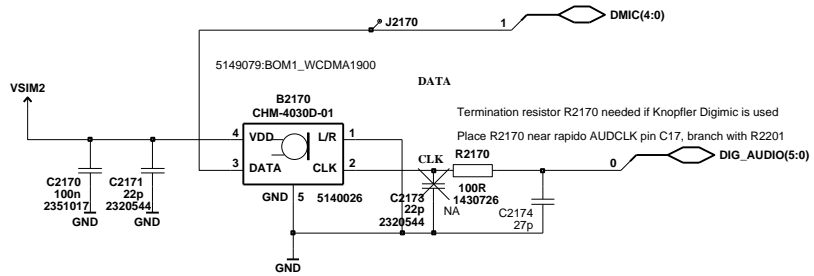
EARP REF 2100-2109



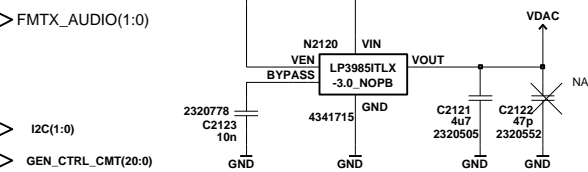
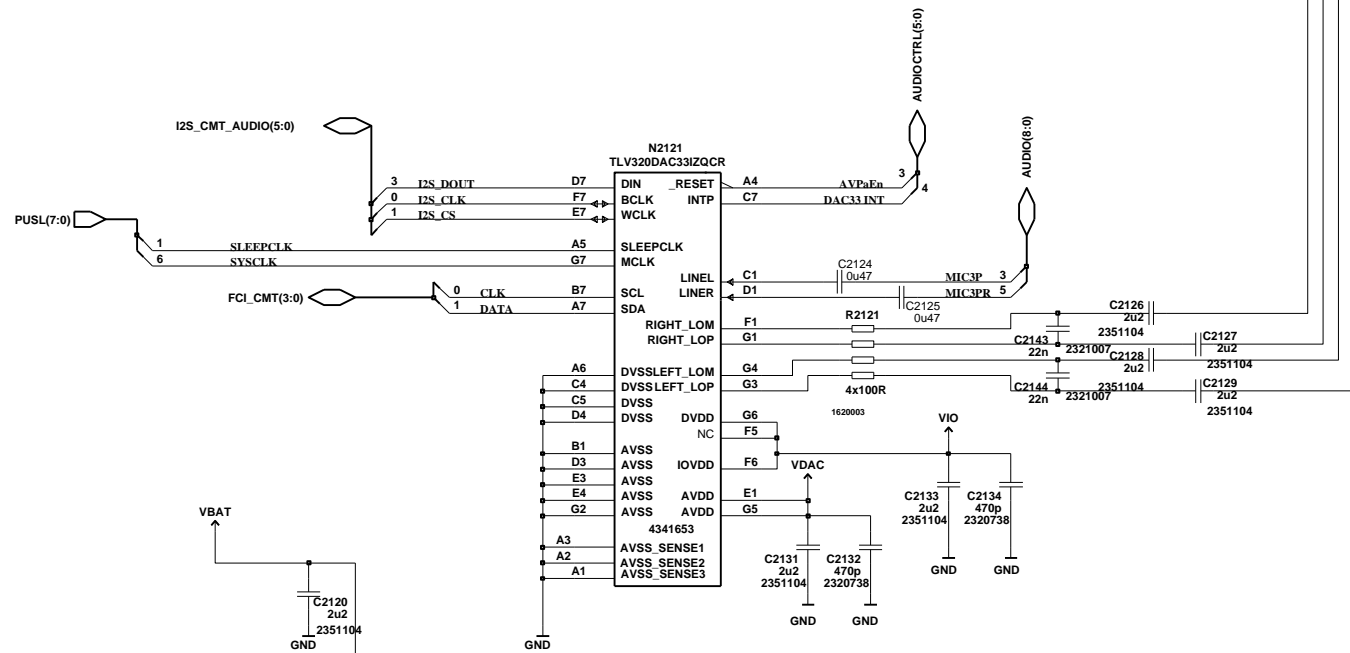
Vibra REF 2110-2119



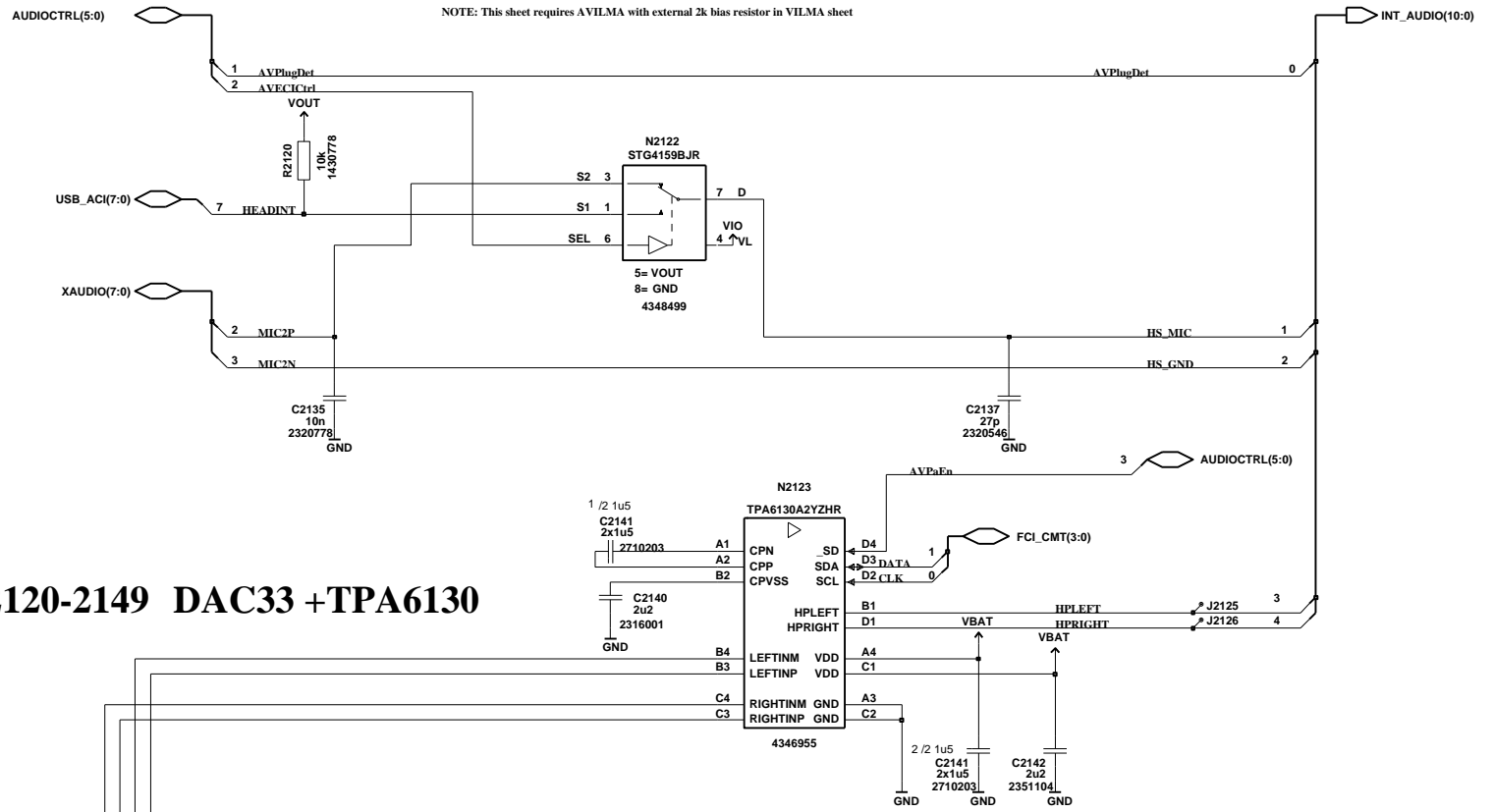
DIGI MIC



REF 2170-2179

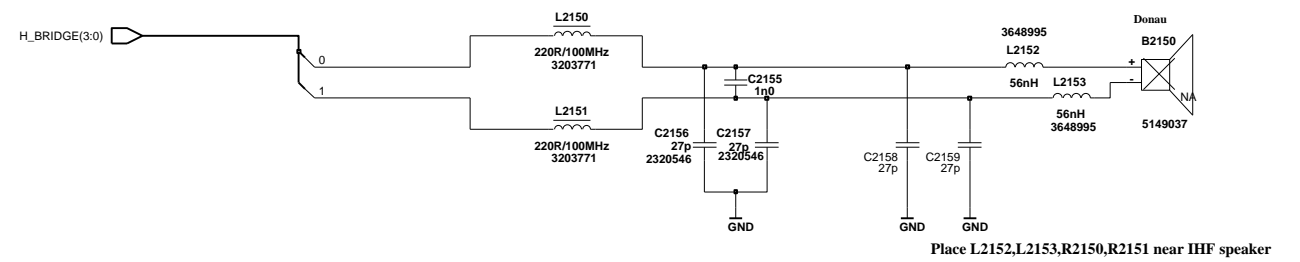


REF 2120-2149 DAC33 + TPA6130



IHF

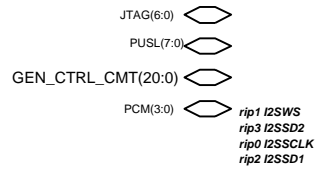
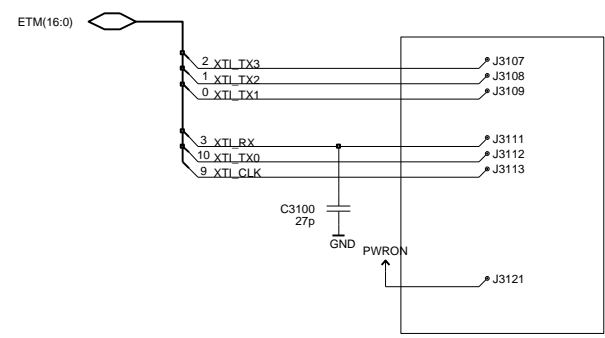
REF 2150-2169



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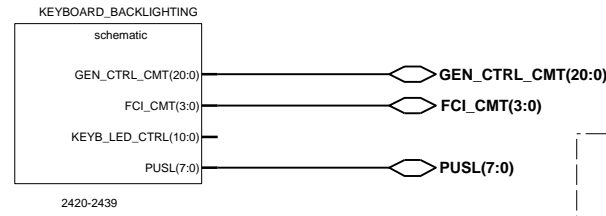
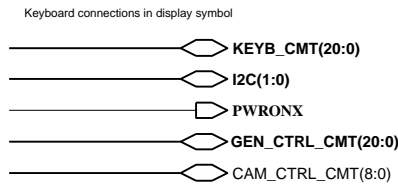
Name Audio sheet with DAC33



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Name EMU:RAP Test Interface

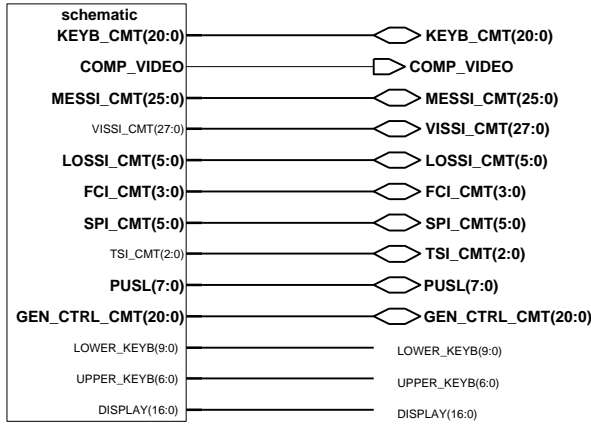


Display Backlighting
2440-2449

Keyboard Backlighting
2420-2439

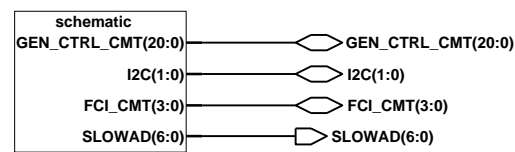
2500-2549

DISPLAY

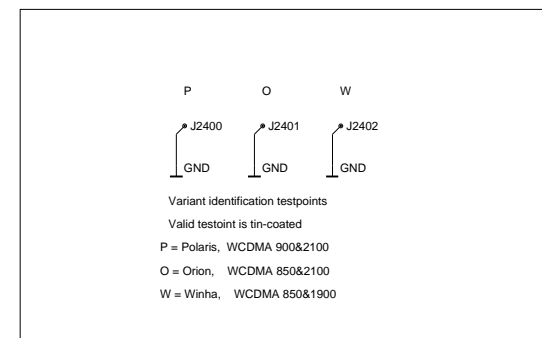
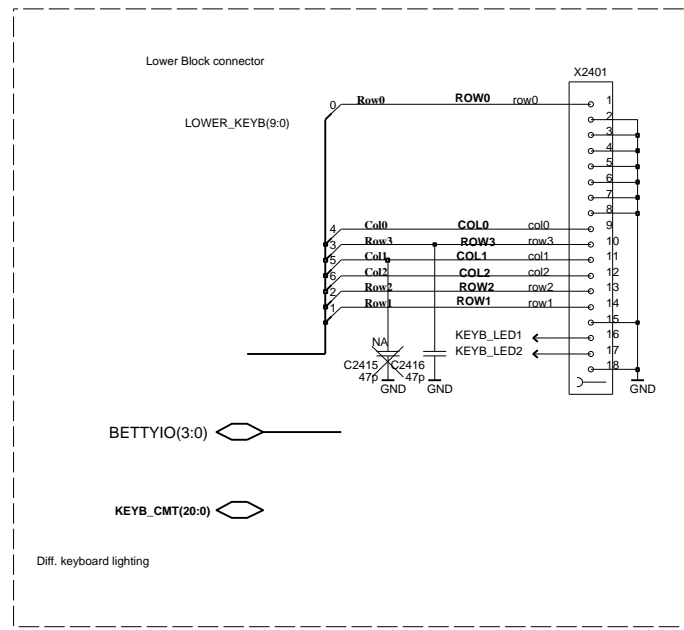
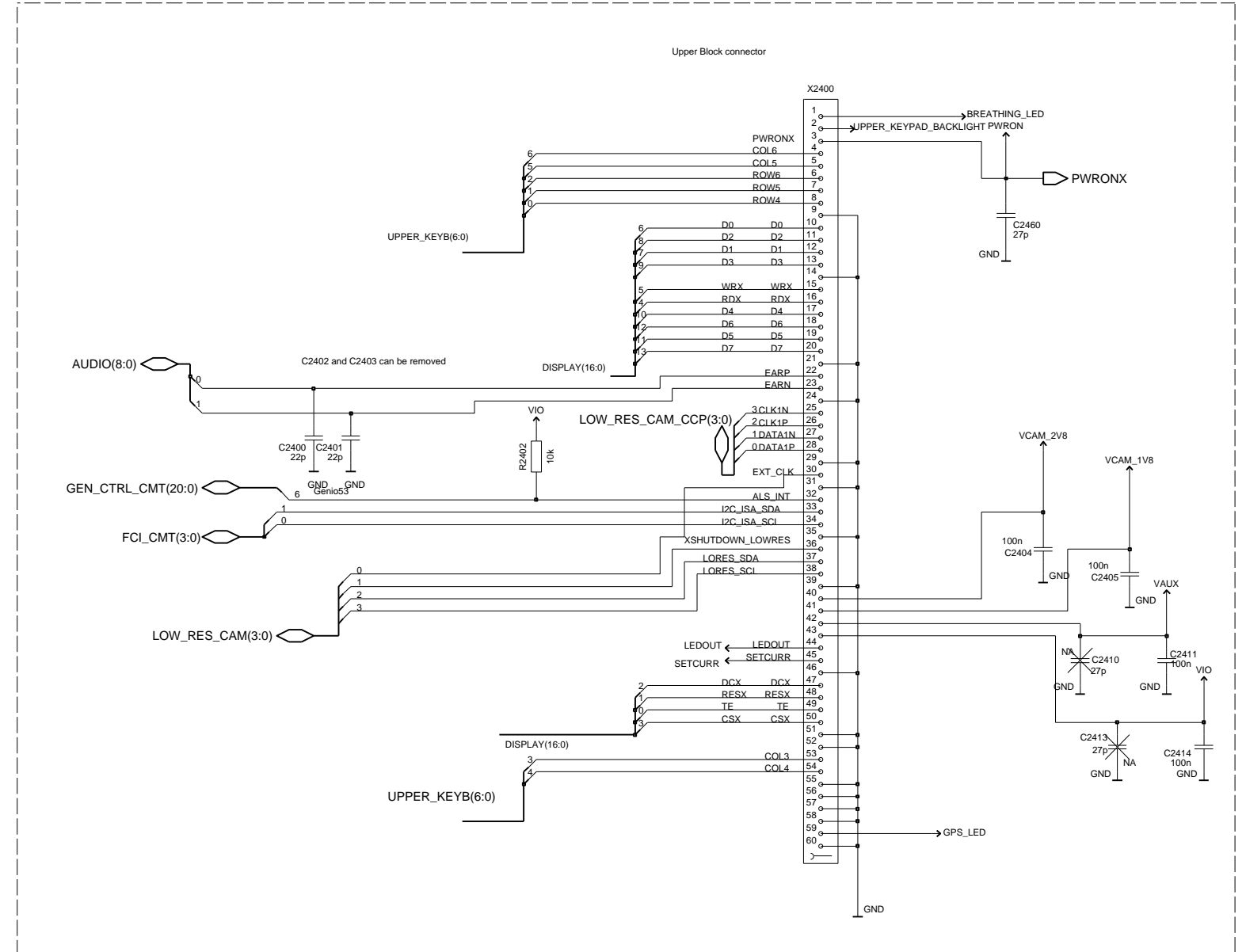


2450-2499

SENSORS



6500-6599



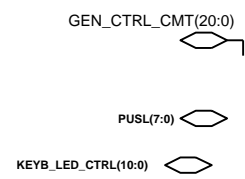
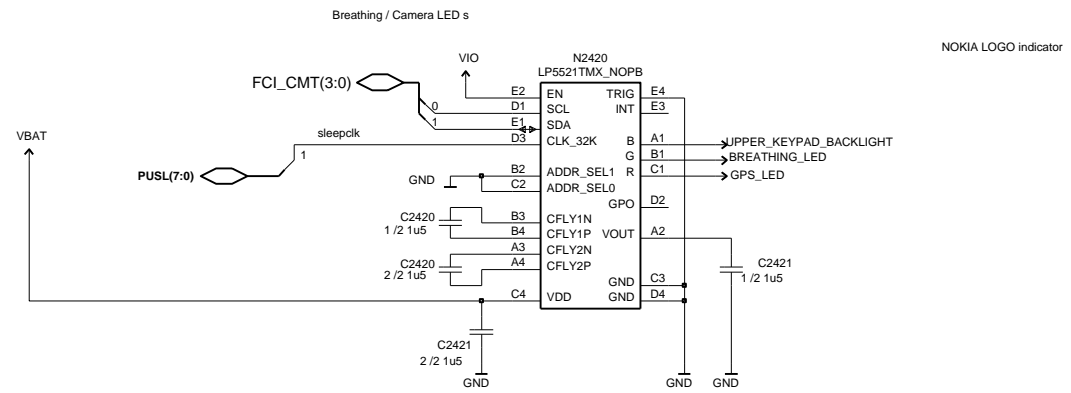
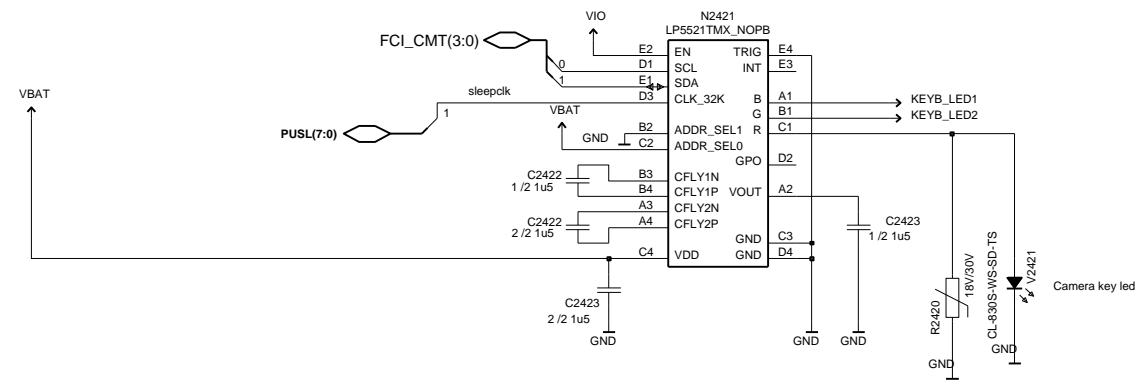
COMP_VIDEO

BETTYIO(3:0)

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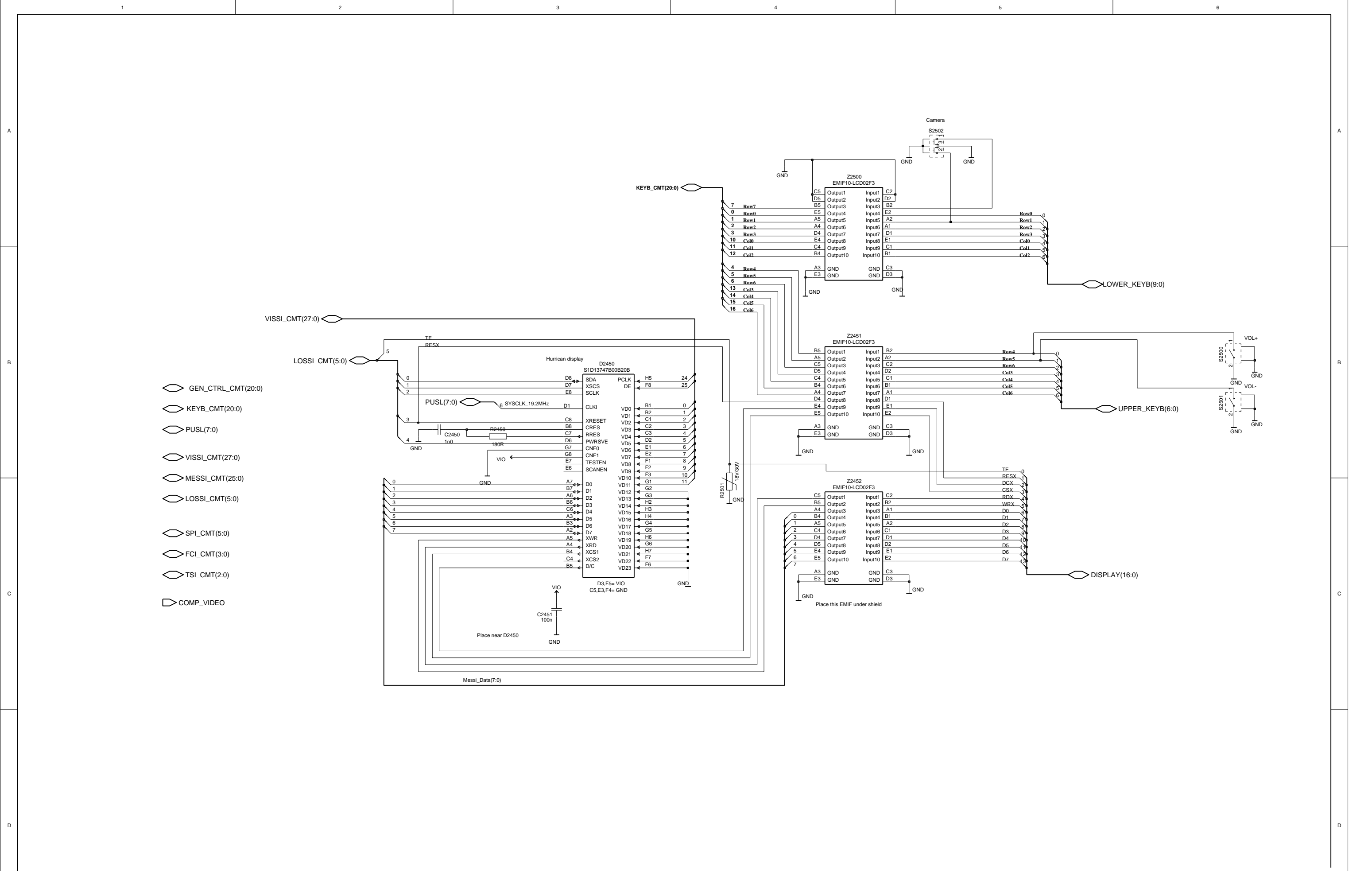
Name UI TOP level



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Name Keyboard backlighting



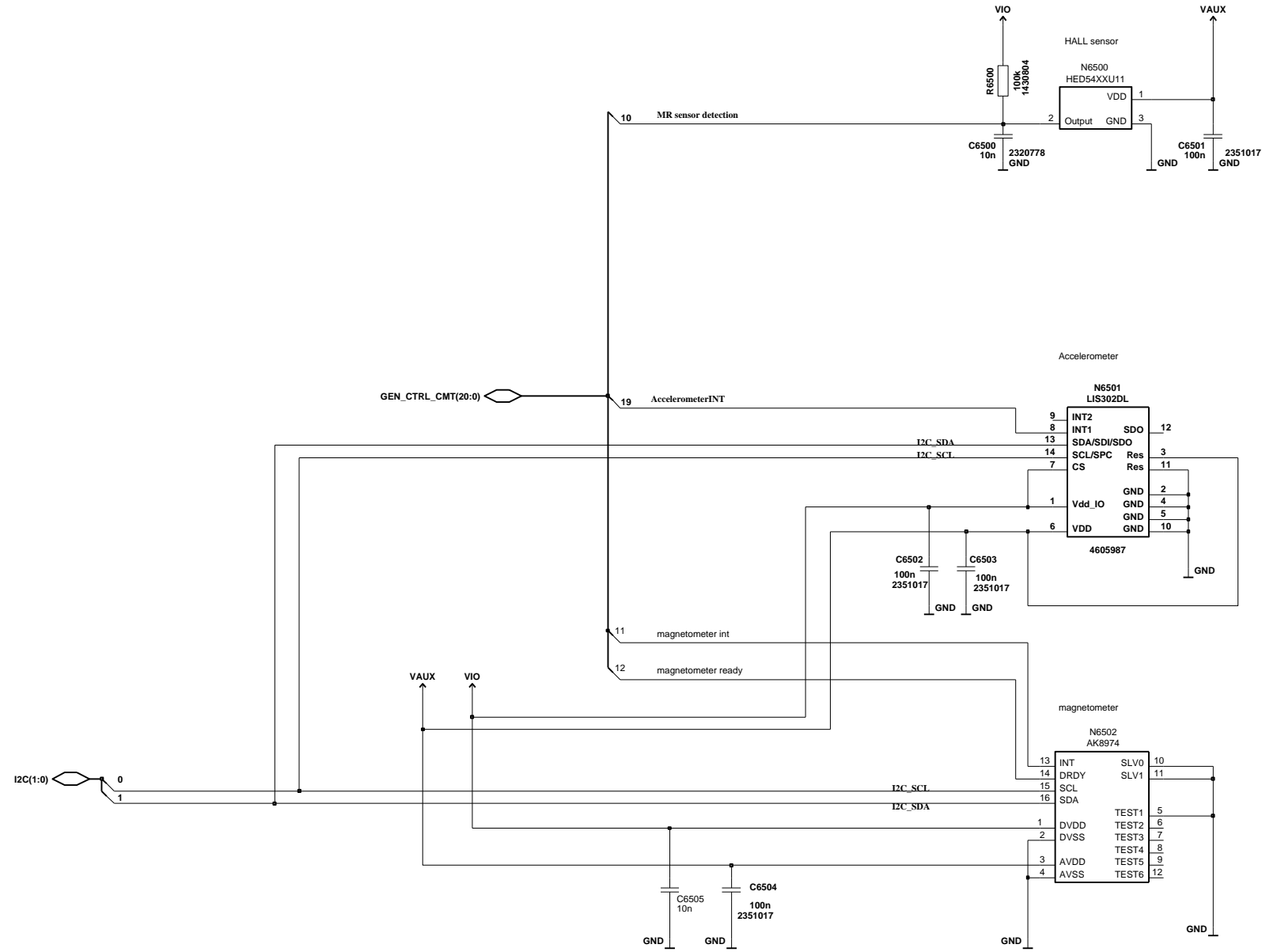
GEN_CTRL_CMT(20:0)
 KEYB_CMT(20:0)
 PUSL(7:0)
 VISSI_CMT(27:0)
 MESSI_CMT(25:0)
 LOSSI_CMT(5:0)
 SPI_CMT(5:0)
 FCI_CMT(3:0)
 TSI_CMT(2:0)
 COMP_VIDEO

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Name _____
 display _____

ALS is located Upper PWB



FCL_CMT(3:0)

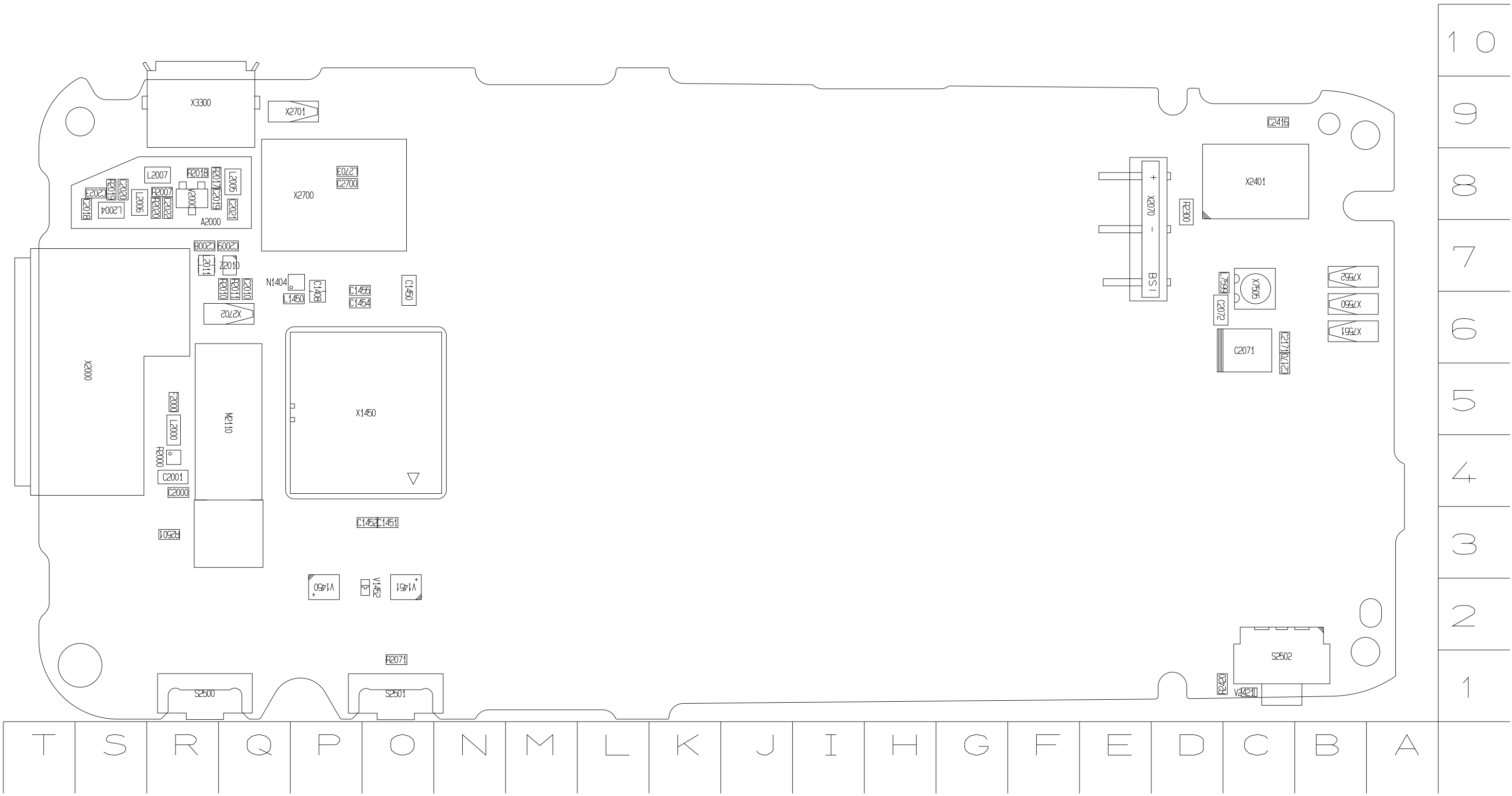
I2C(1:0)

SLOWAD(6:0)

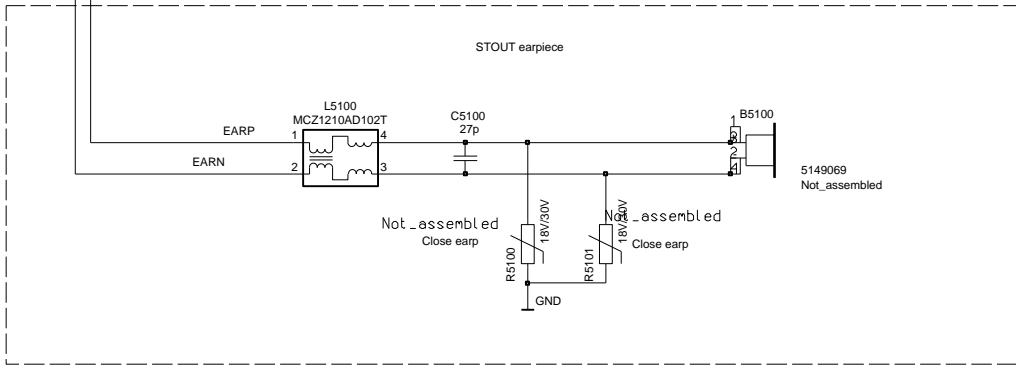
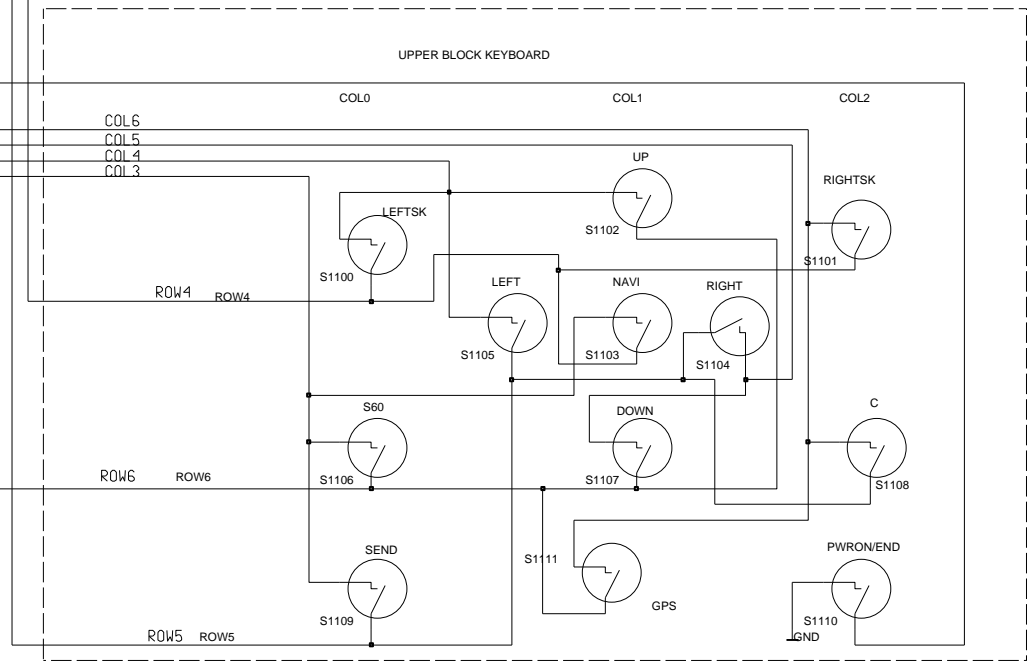
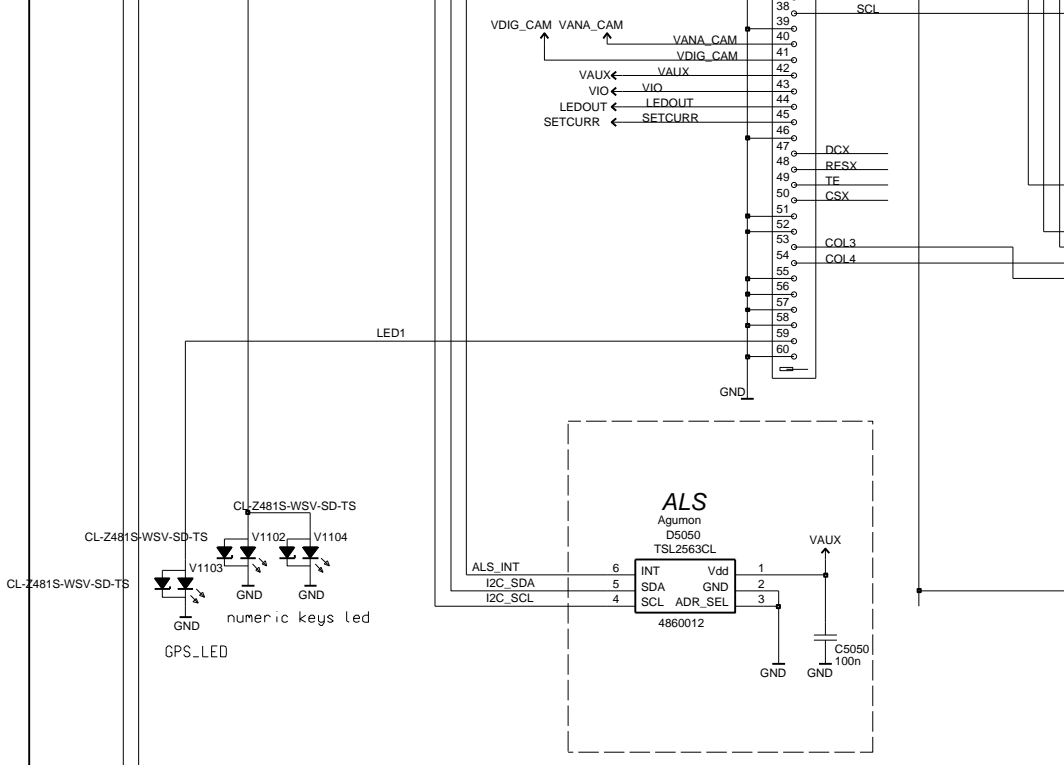
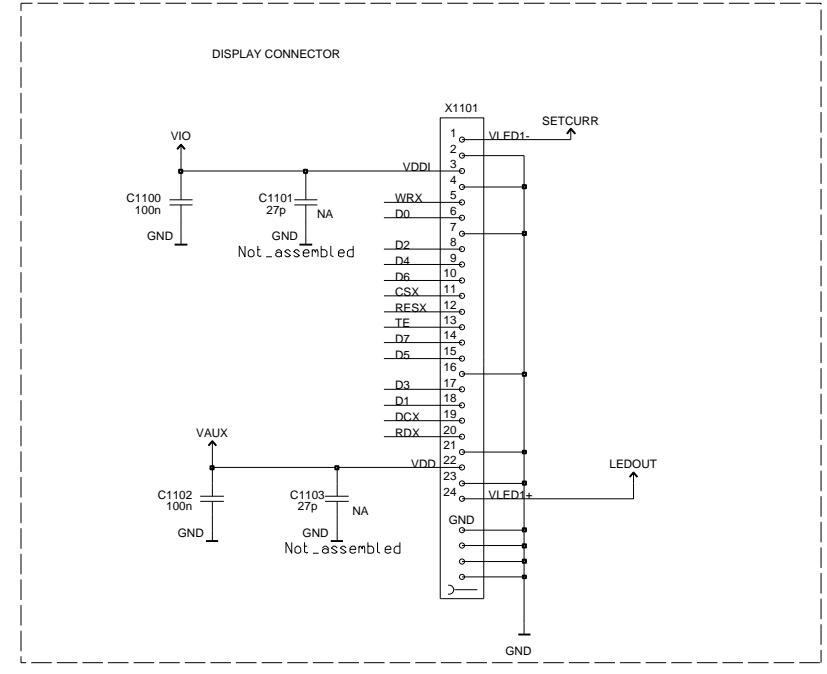
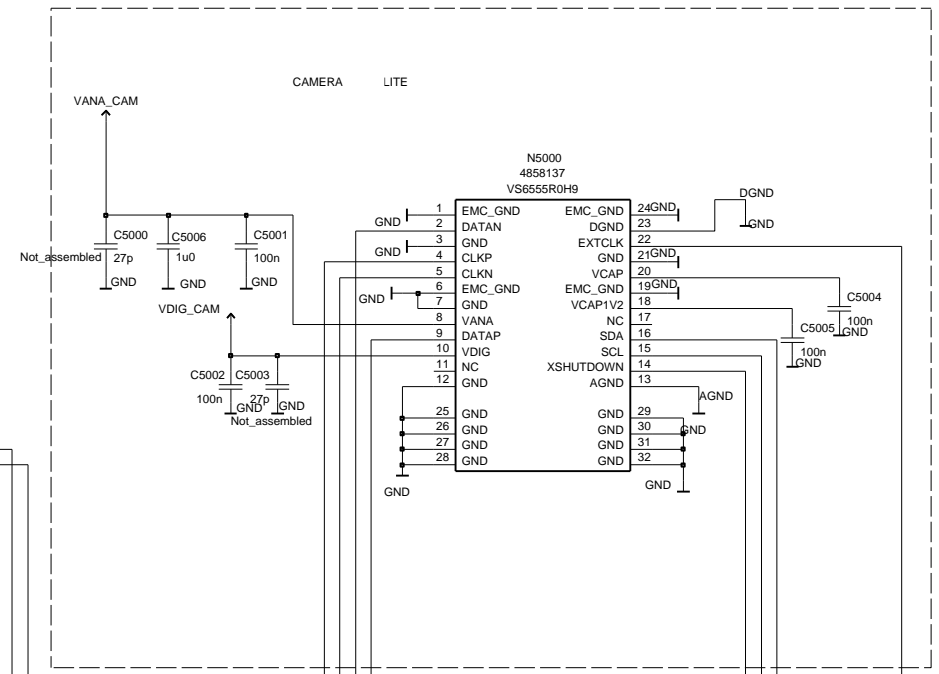
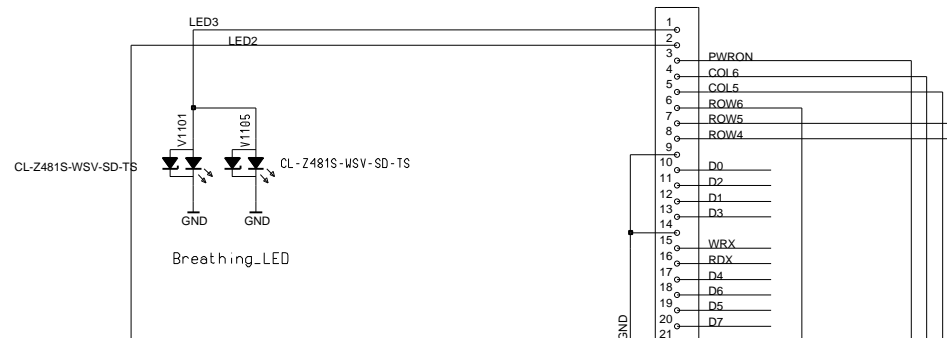
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Name SENSORS



1	0
0	
00	
7	
0	
5	
4	
3	
2	
1	



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Name Main flex

