

Troubleshooting Manual

K630 - V640 - K660



ABOUT

General information

The purpose of this document is to provide enhanced technical information for Sony Ericsson repair technicians in order to assist during service, repair and troubleshooting operations on Sony Ericsson mobile phones. It should be used as a complement to other repair instructions and tools as notified by the local Sony Ericsson representative.

To search for components throughout the entire document use the “search” function in Adobe Acrobat Reader 7.0 (or later version) and enter the component name or other word. Use zoom to enlarge.

For easier navigation of the document you can use the bookmarks that appear in the Bookmarks tab on the left side of the Adobe Acrobat Reader window. Each bookmark jumps to a page in the document.

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Revision History

Rev.	Date	Changes / Comments
1	06/20/2008	Initial revision.

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K630, V640 and K660 Equipment List

K630 and V640



Note: Additional information about the equipment used for TRS can be found in the Repair Tools Catalogue on CSPN or on the following location: CSPN – Repair Instructions – Electrical – K630, V640 – Equipment List.

K660

Location: CSPN-Repair Instructions-Level: Mechanical-Tool Catalogue
The 0, 64 mm Test Probes is recommended by Sony Ericsson when DMM is in use see picture 1.

Picture 1



Spectrum Analyzer

HP 8595E or similar

Location: CSPN-Repair Instructions-Level: Mechanical-Tool Catalogue

RF probe

HP 85024A or similar

Location: CSPN-Repair Instructions-Level: Mechanical-Tool Catalogue

Mobile Phone Tester

Yokogawa VC230 or similar

Location: CSPN-Repair Instructions-Level: Mechanical-Tool Catalogue

FM Signal Generator

Agilent E4433B or similar

Location: -

RF Adaptor

Adaptor 33 N-BNC-50-1

Adaptor to Signal Generator RF Output

See Picture 2

Location: -

Picture 2



PC Package & PC Software

PC Package (Computer)

Location: CSPN-Repair Instructions-Level: Mechanical-Tool Catalogue

Urquell Fault Trace SW with project file

K630 and V640

Location: CSPN-Repair Instructions-Electrical-K630, V640-Trouble Shooting Application

Project File: K630, K660, V640 Project_R1A

K660

Location: CSPN-Repair Instructions-Electrical-K660 -Trouble Shooting Application

Project File: K630, K660, V640 Project_R1A

Drivers

SEPI BOX Drivers

Location: EMMA III-Drivers-SEPI

SE Communication Interface SEPI BOX

Location: CSPN-Repair Instructions-Level: Mechanical-Tool Catalogue

Part number: LTN 214 1484

See Picture 3.

Picture 3



Cables

USB Computer Cable

Location: CSPN-Repair Instructions-Level: Mechanical-Tool Catalogue
See Picture 4.

Picture 4



DSU-60 /

Test SIM GSM/UMTS

One Test SIM GSM/UMTS is needed to perform Current Consumption Test, see Picture 21.
Location: To buy a Test SIM GSM/UMTS, please contact your supplier of test equipment.

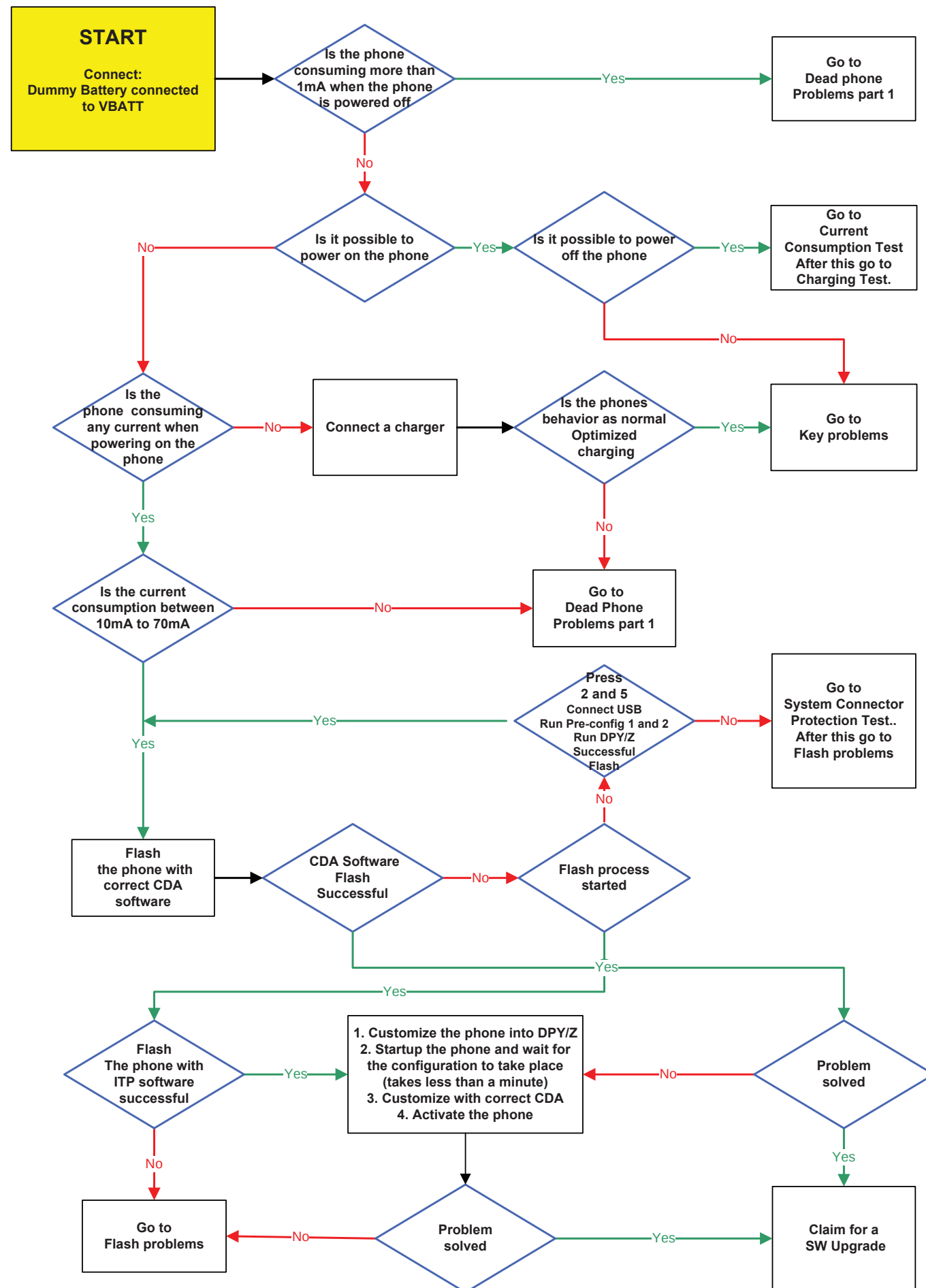
Picture 21



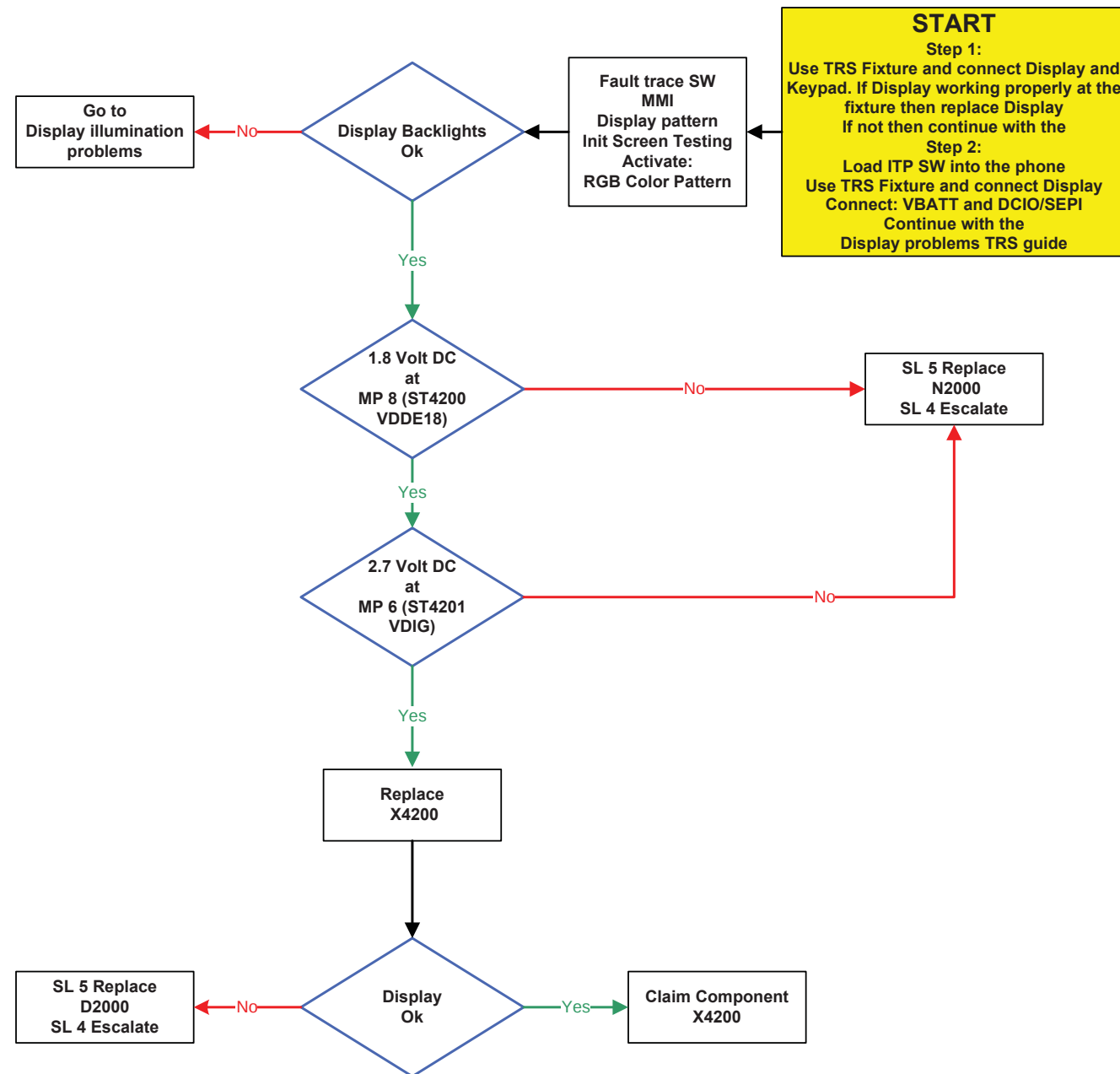
Sony Memory Stick M2

Any functional Memory Stick Micro M2 Card, see Picture 22

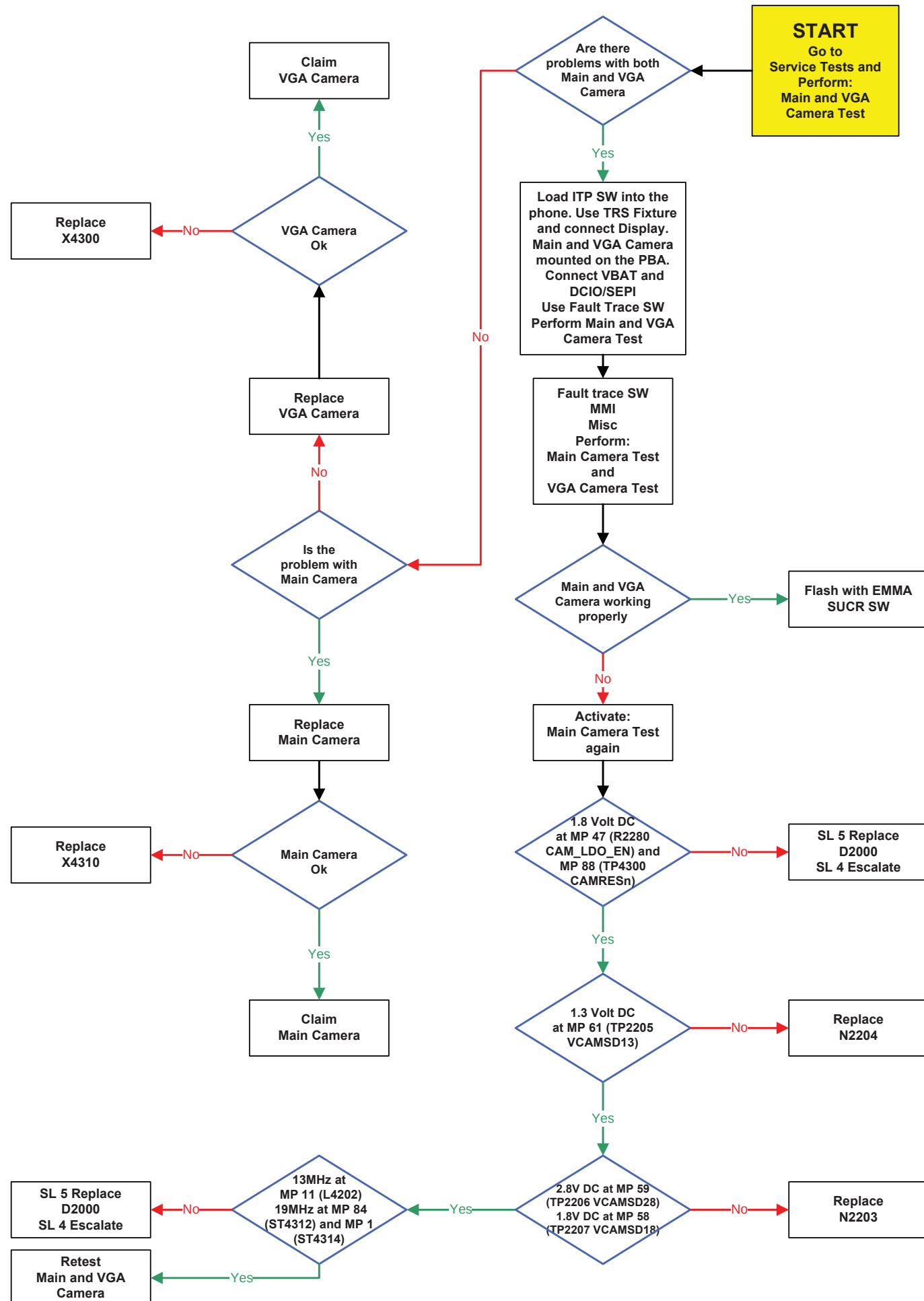
On/Off problems



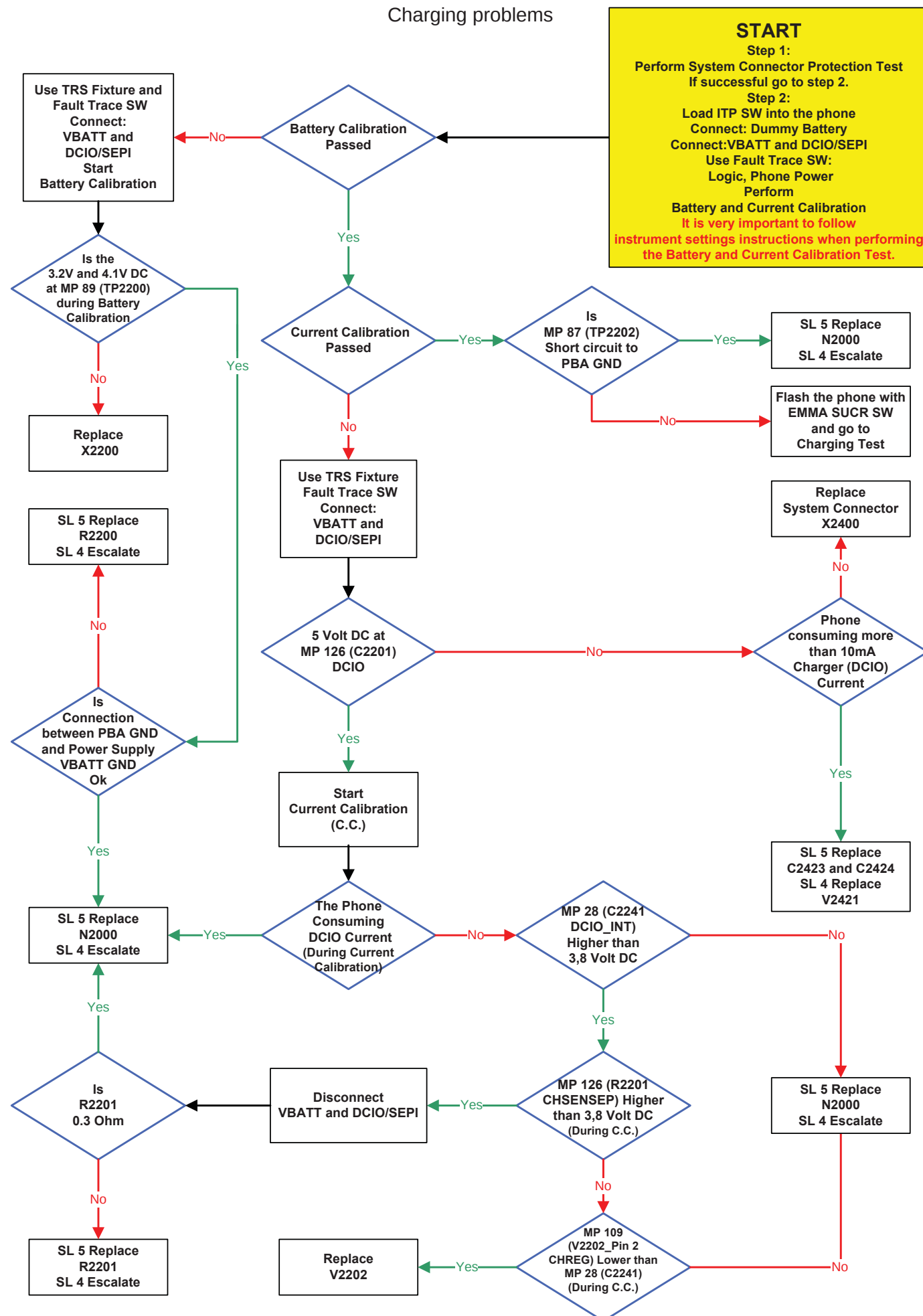
Display problems



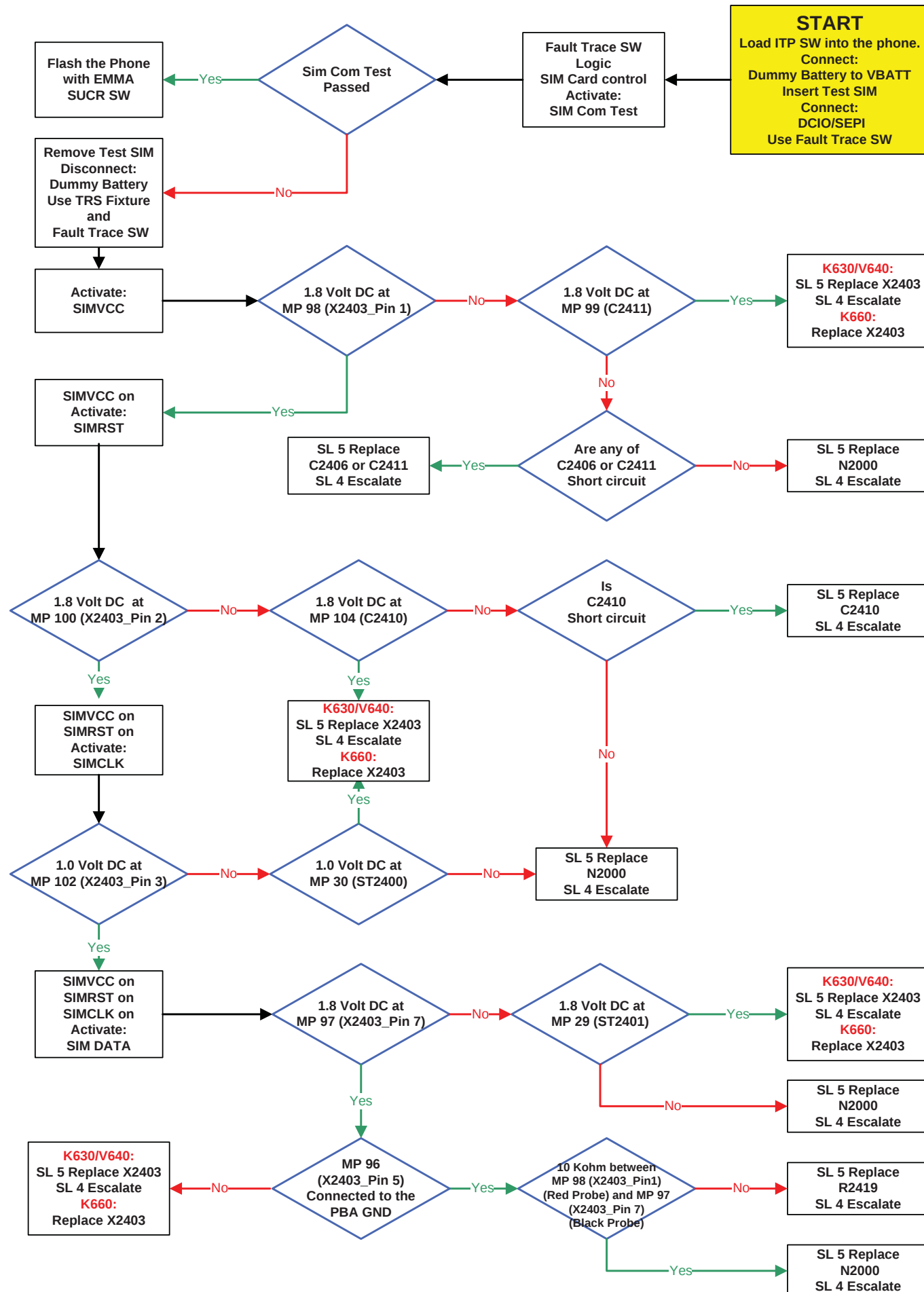
Main and VGA Camera problems



Charging problems



SIM problems



Step 4 with Fault Trace SW application:

- Flash the phone with ITP SW
- Use the TRS Fixture
- Connect the:

Power Supply Channel 1 VBATT:
Instrument settings: Voltage: 3.8 Volt, Limiter 3A

Power Supply Channel 2 DCIO/SEPI
Instrument settings: Voltage: 5 Volt, Limiter 2A
- Connect DCIO/SEPI Cable to the phone

Perform the following tests:

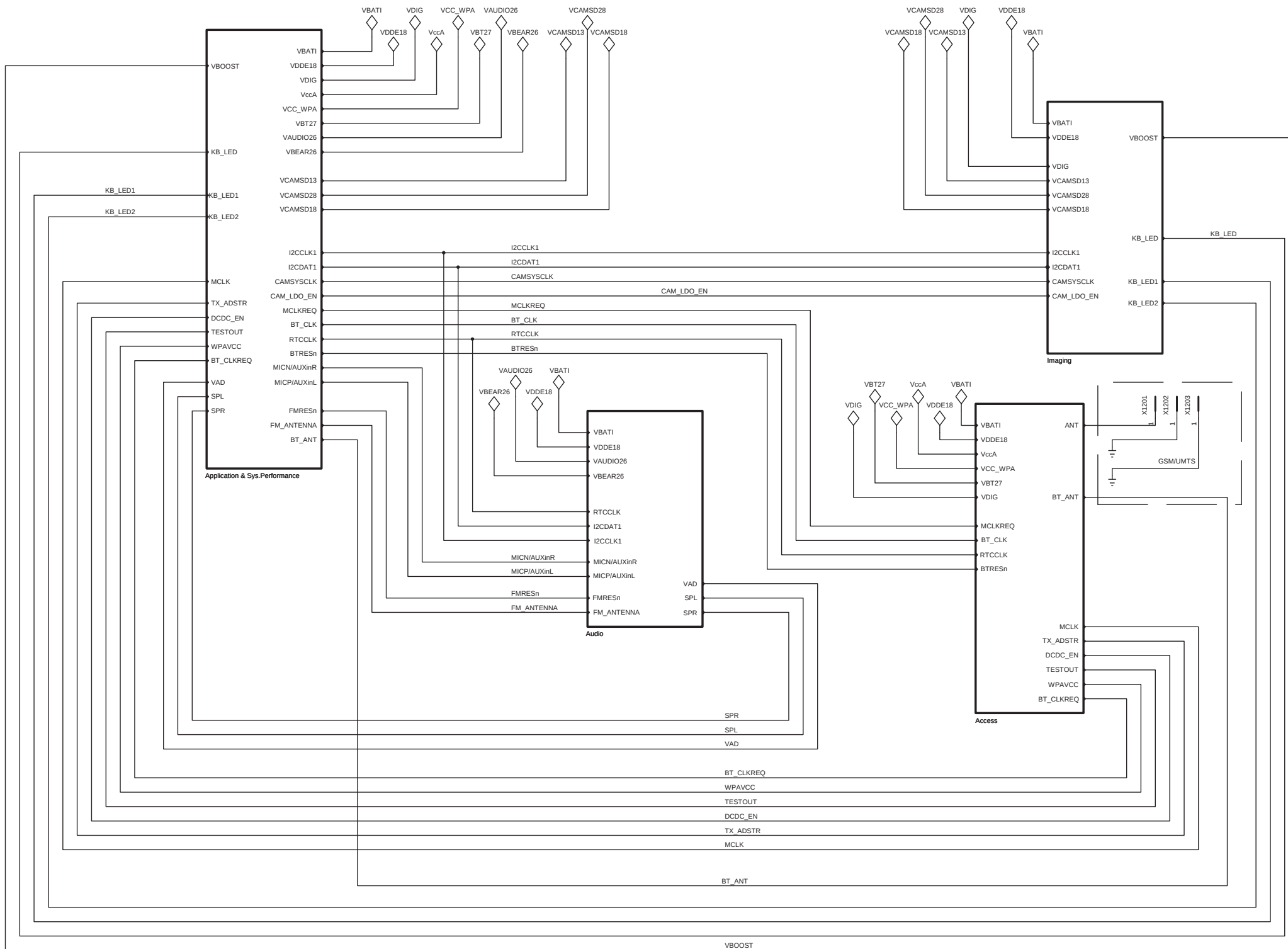
- **Max TX Power GSM 850 MHz**

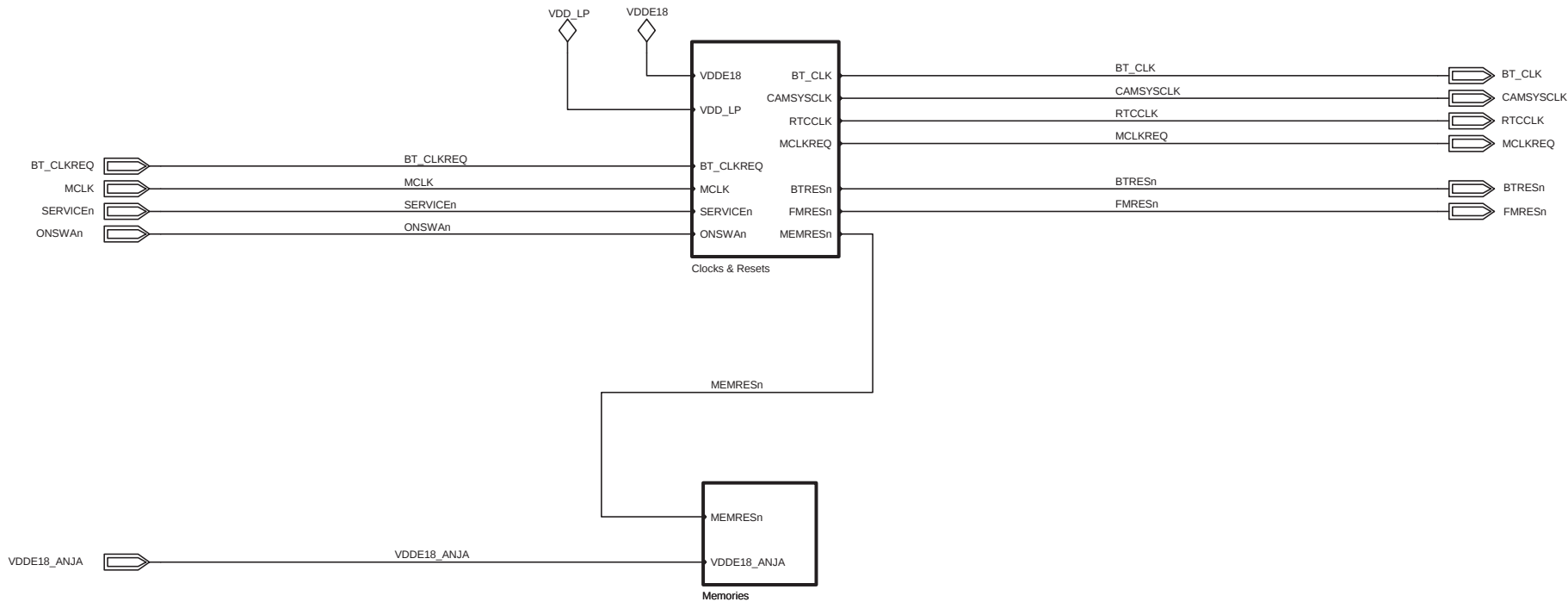
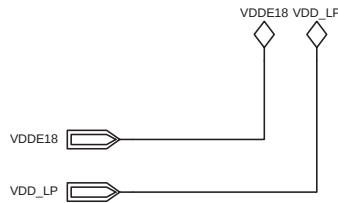
Fault Trace SW settings:

TX and RX GSM
GSM Mode Settings:
TX Switched
GSM Radio Settings:
Select Band

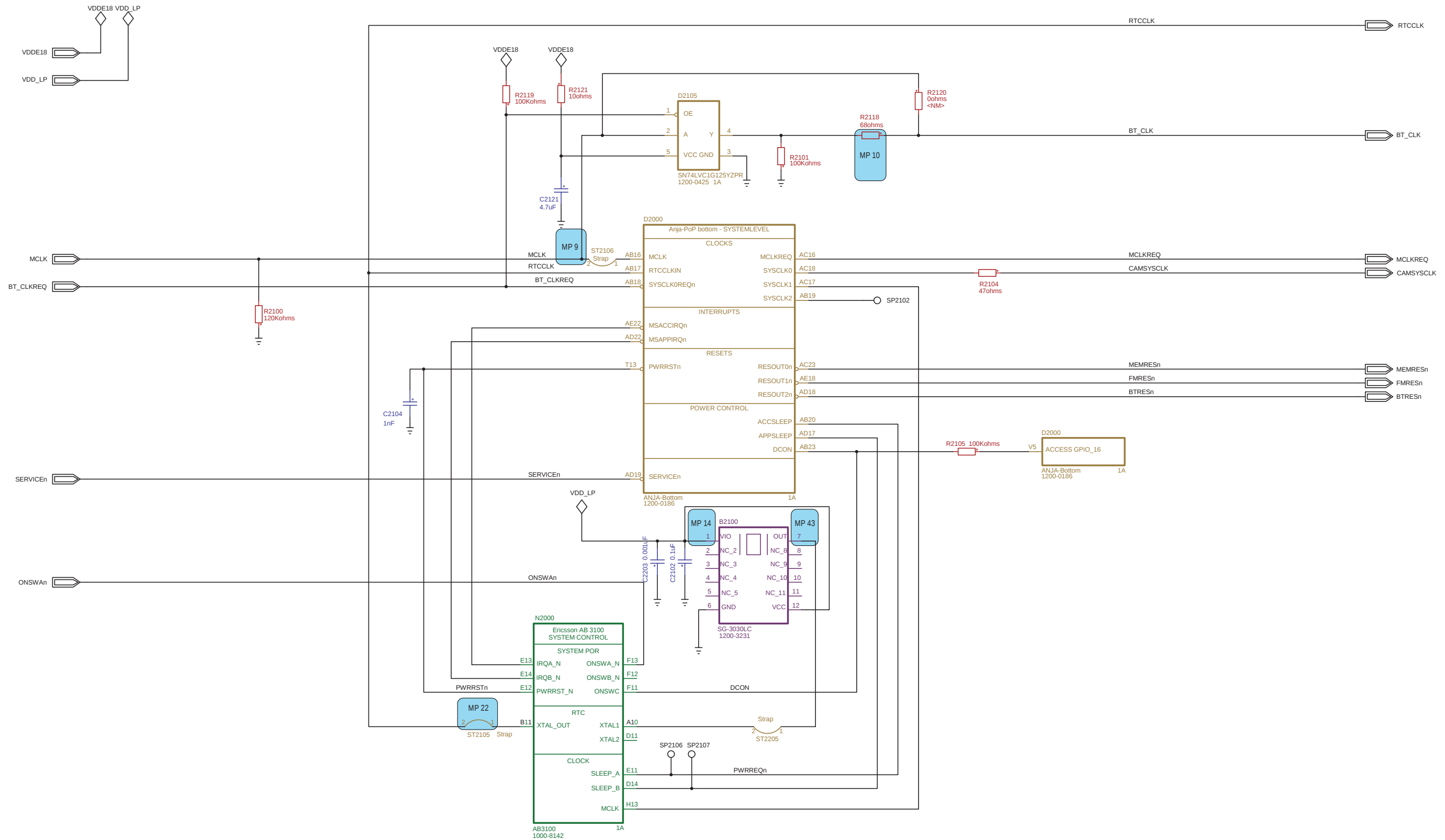
Voltages to N2000

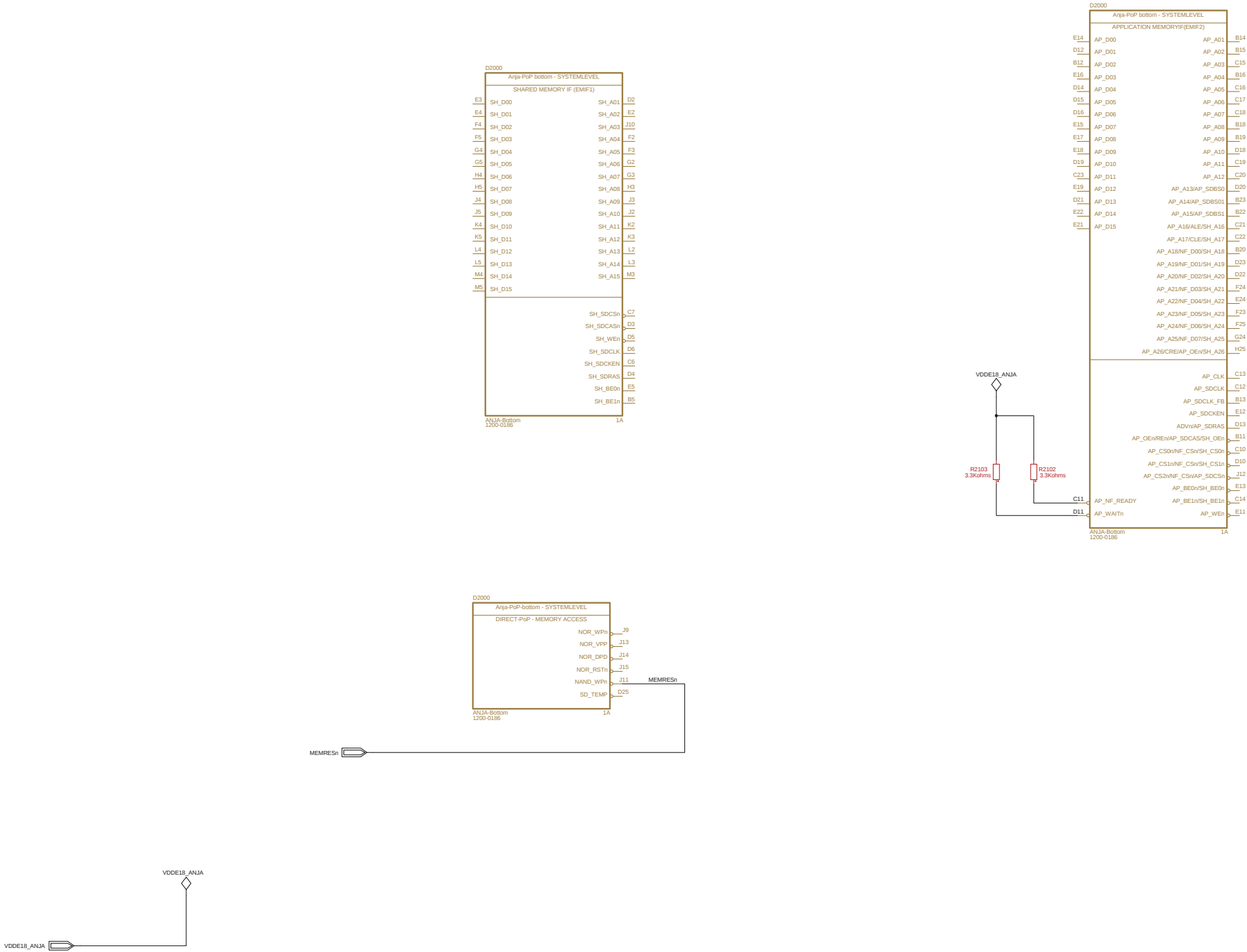
MP	MP 92 (PBA GND)	MP 63 (X2200 Pin 3)	MP 89 (TP2200)	MP 87 (TP2202)	MP 26 (C2242)	Power sup 3.80 V
	GND	VBAT	VBATI	BDATA	VDD_REF	
Phone Off	0.00V	3.8V	3.8V	0.00V	3.8V	
Phone On	0.00V	3.8V</				

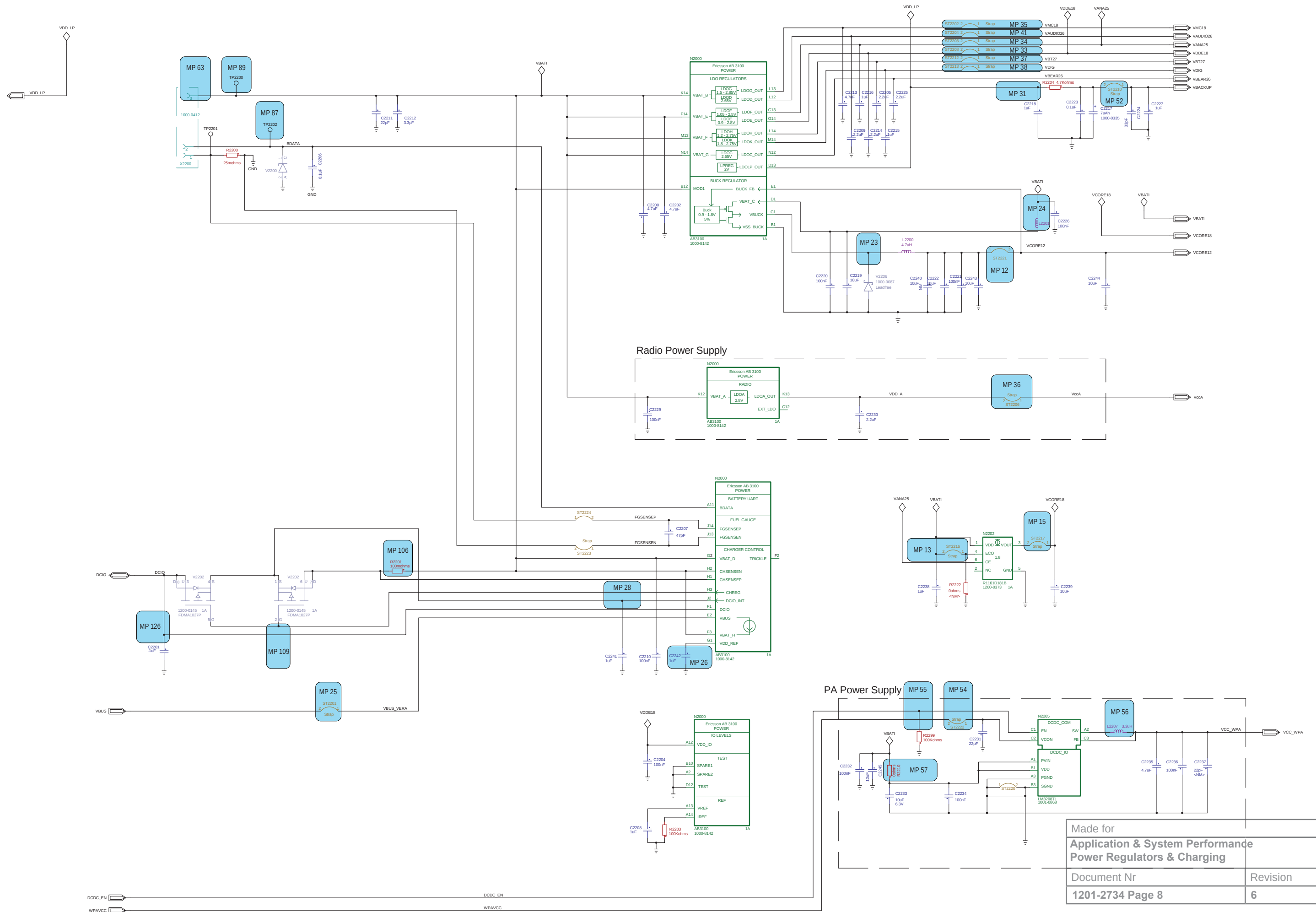


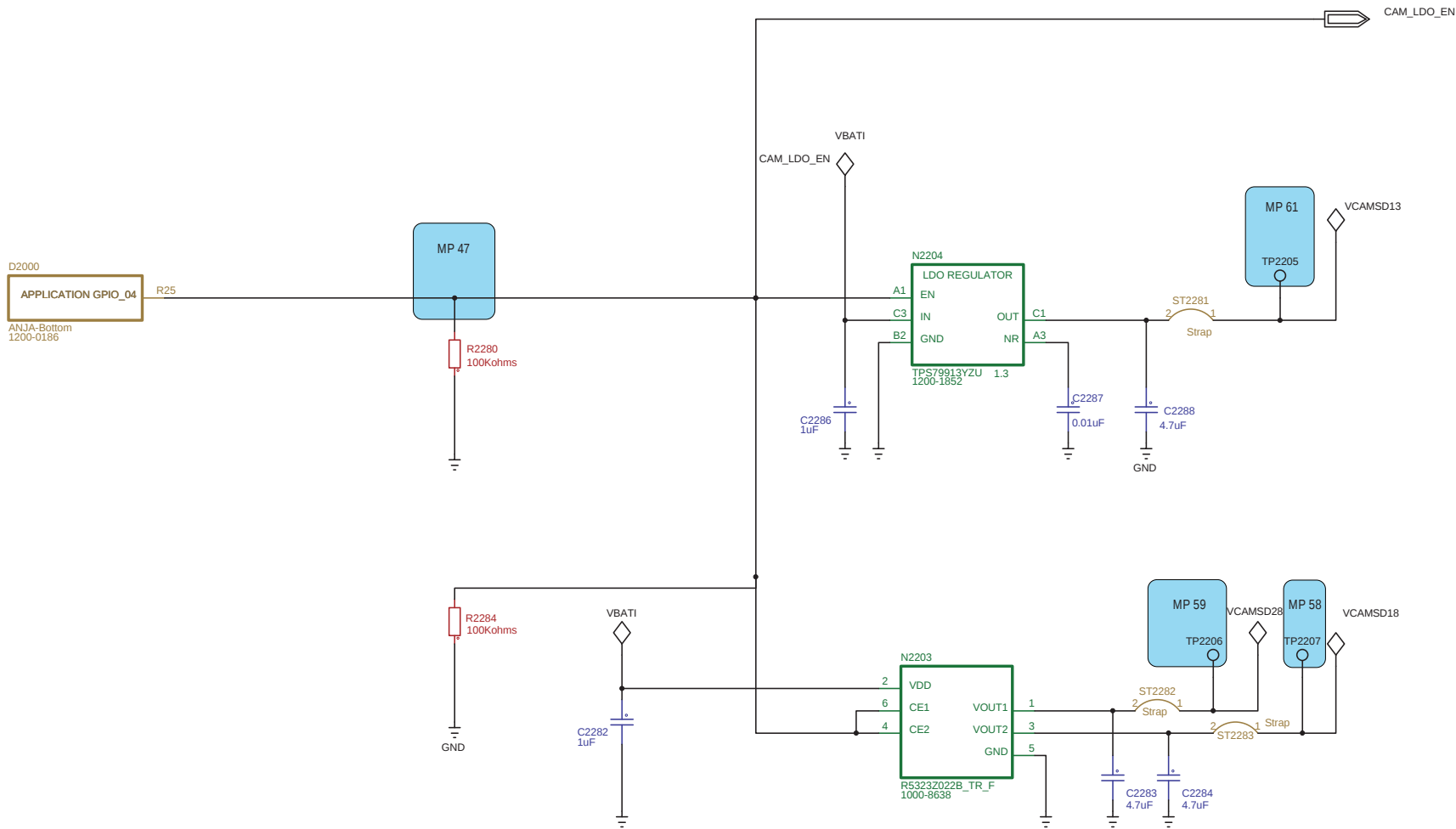
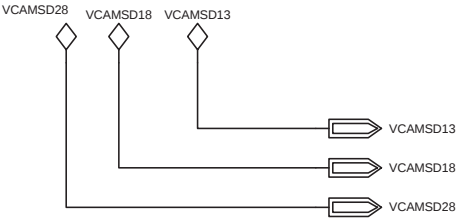
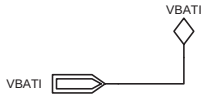


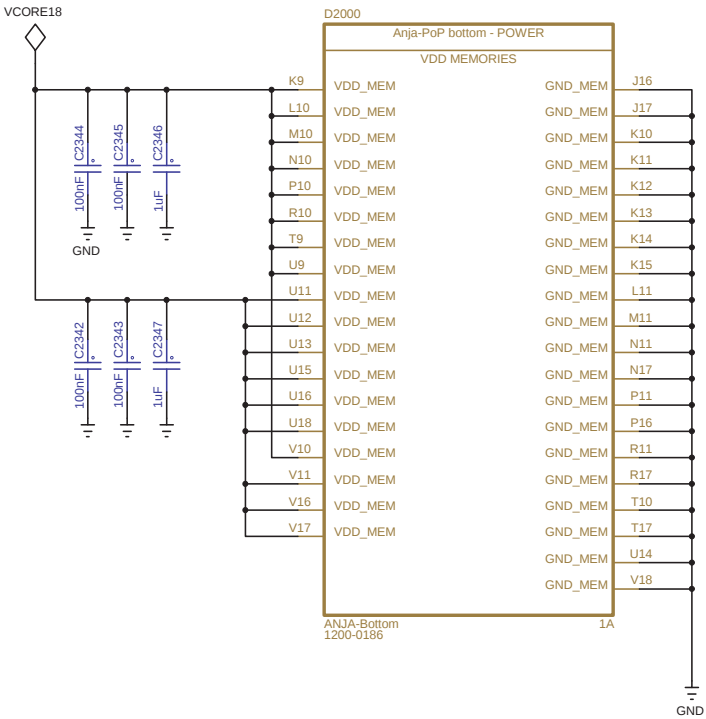
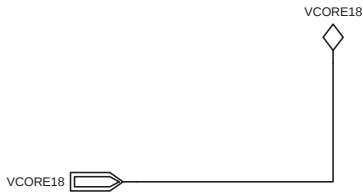
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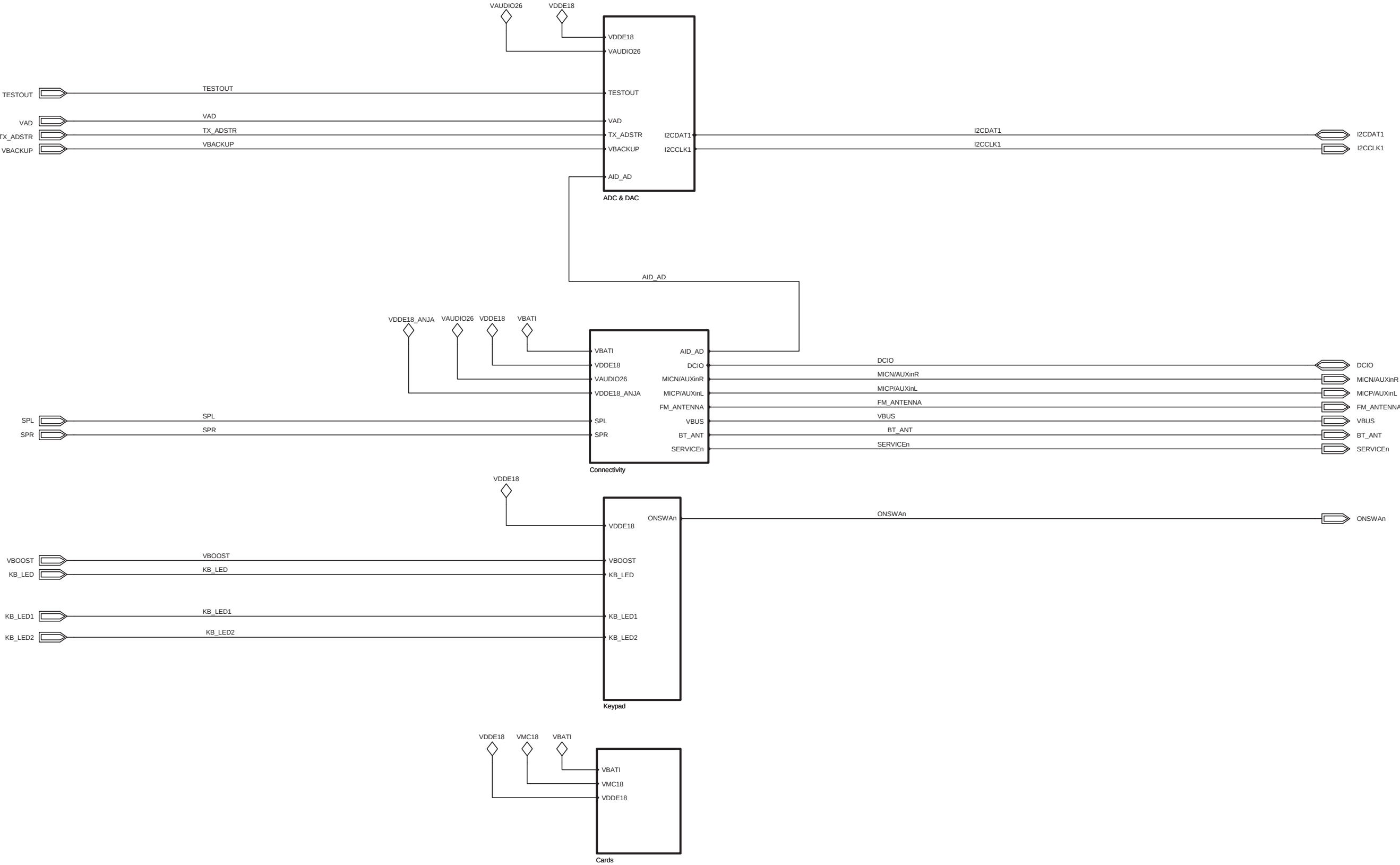


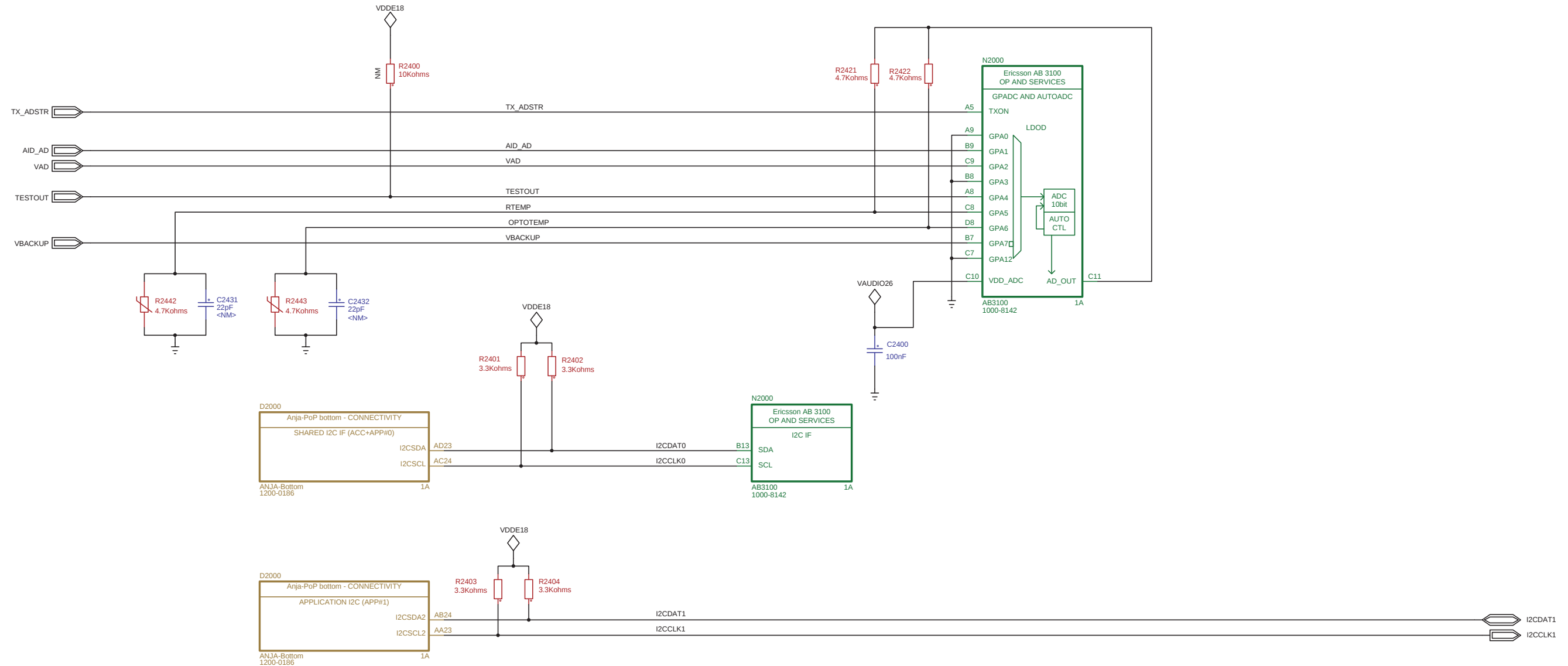


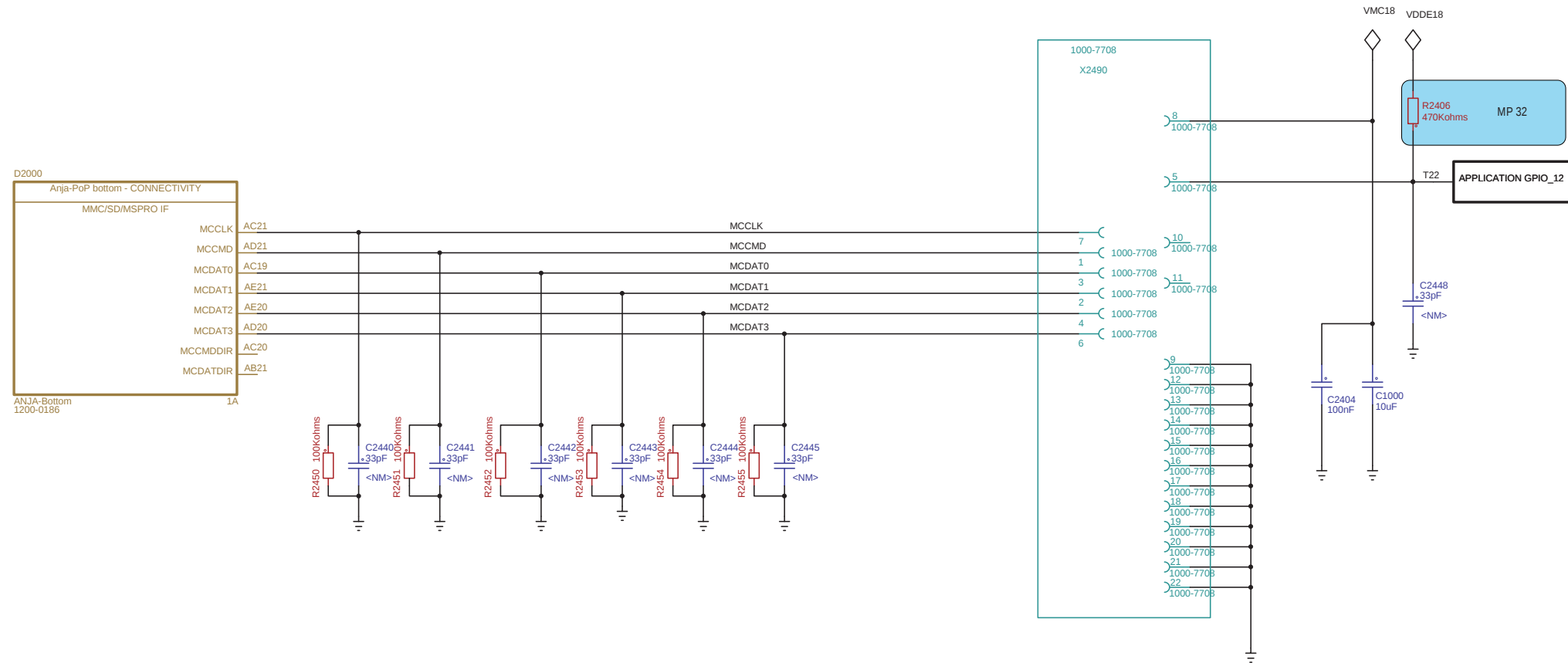


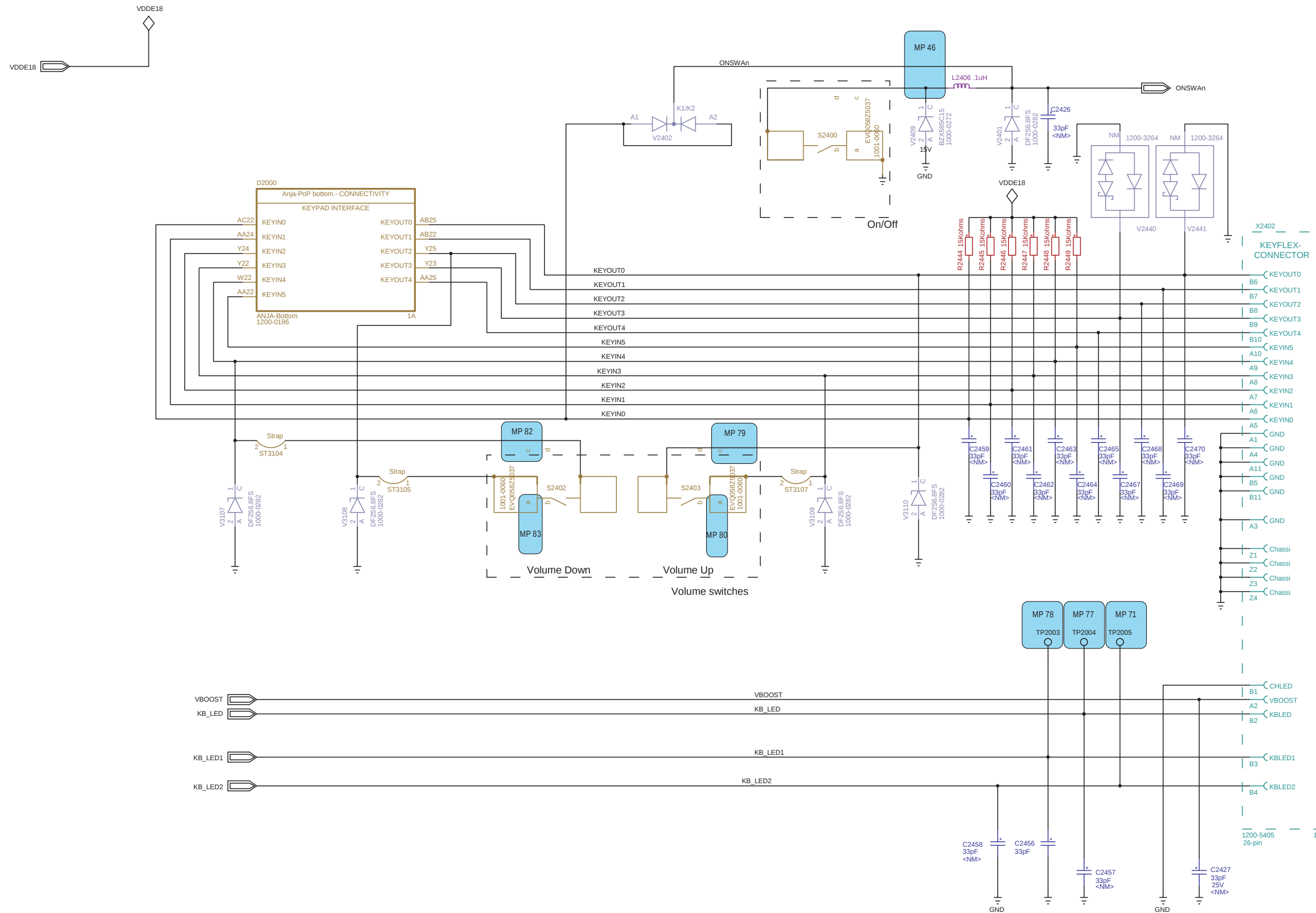


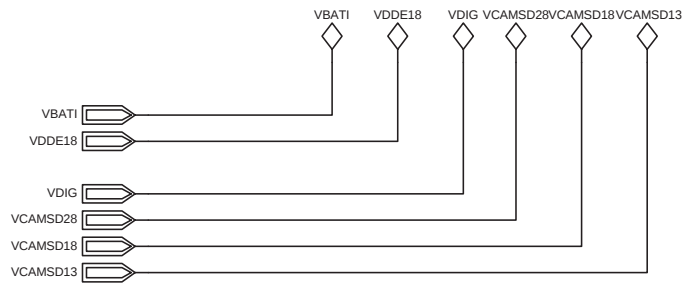
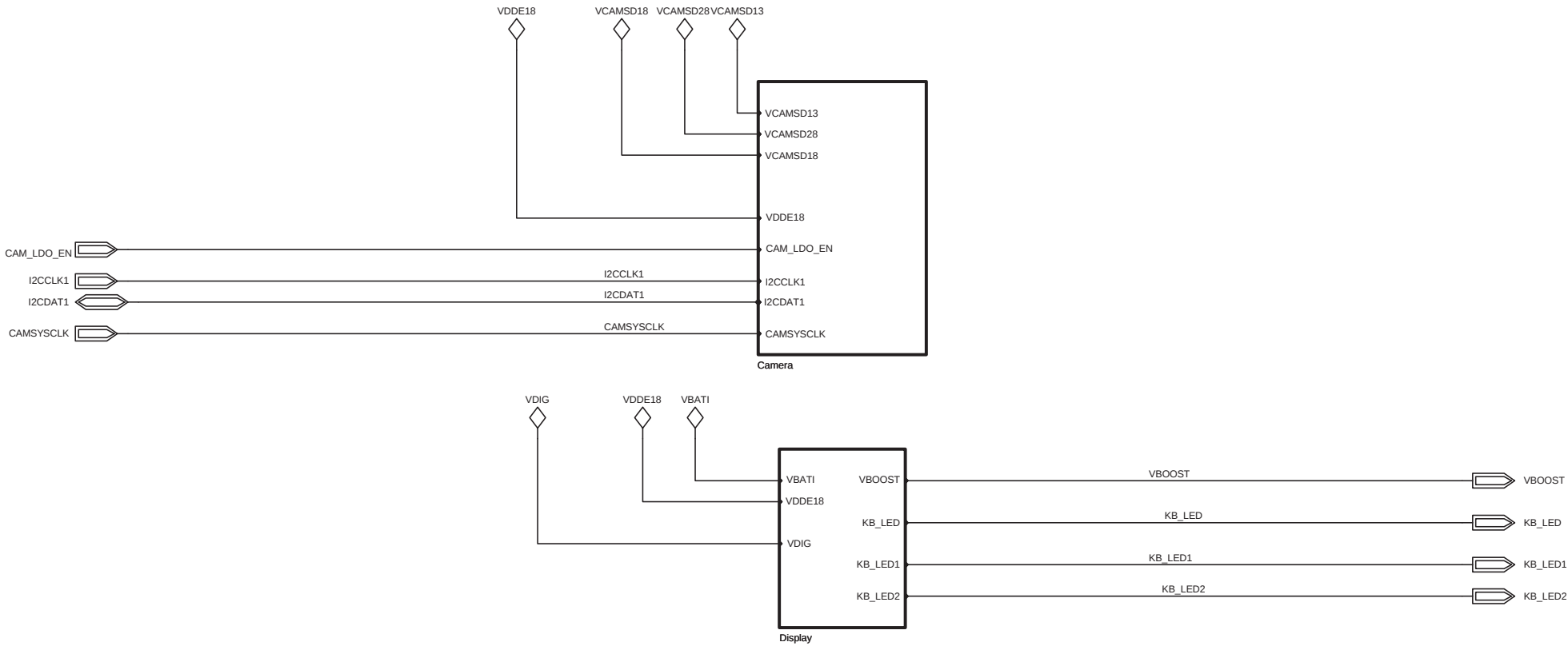




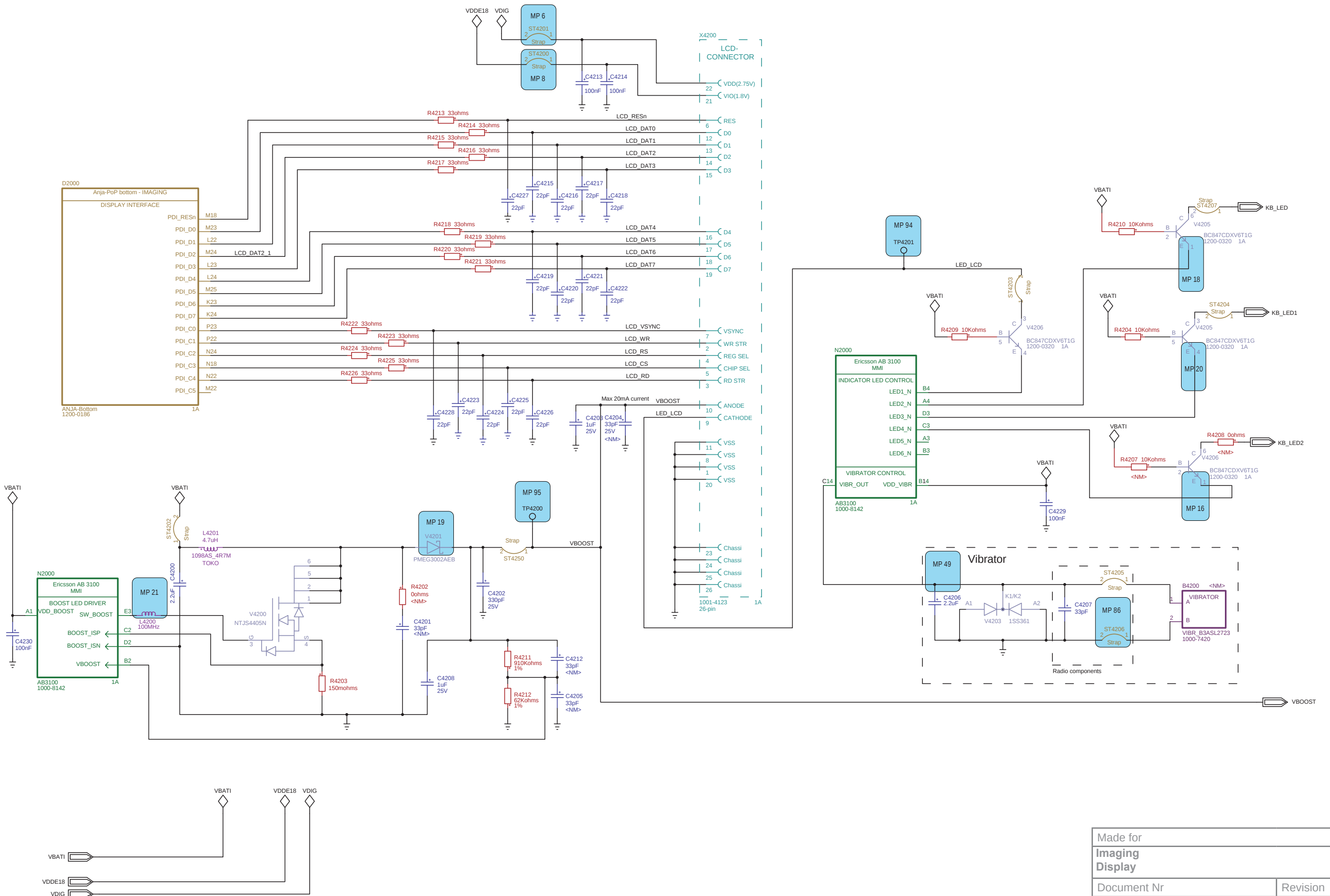


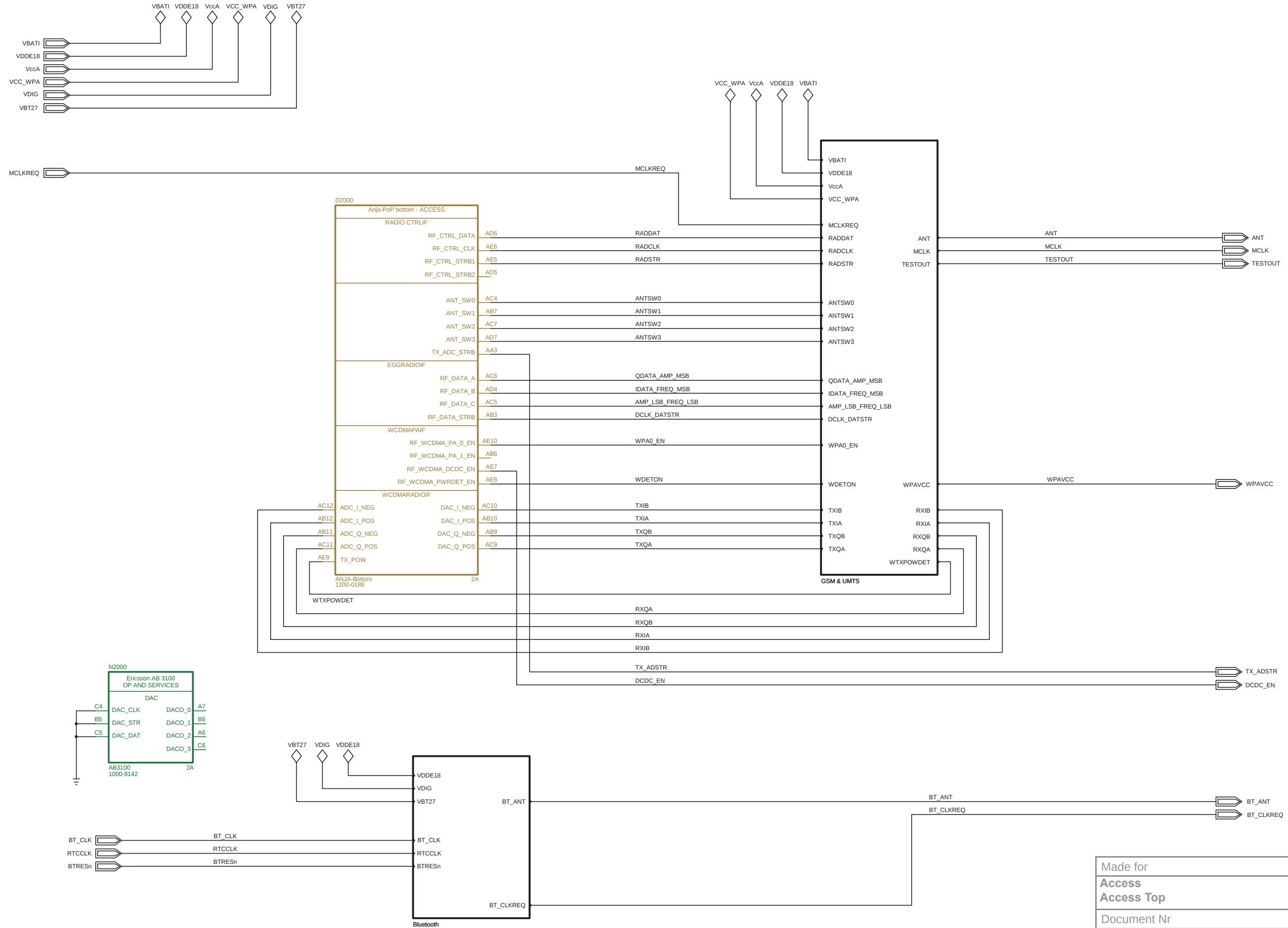


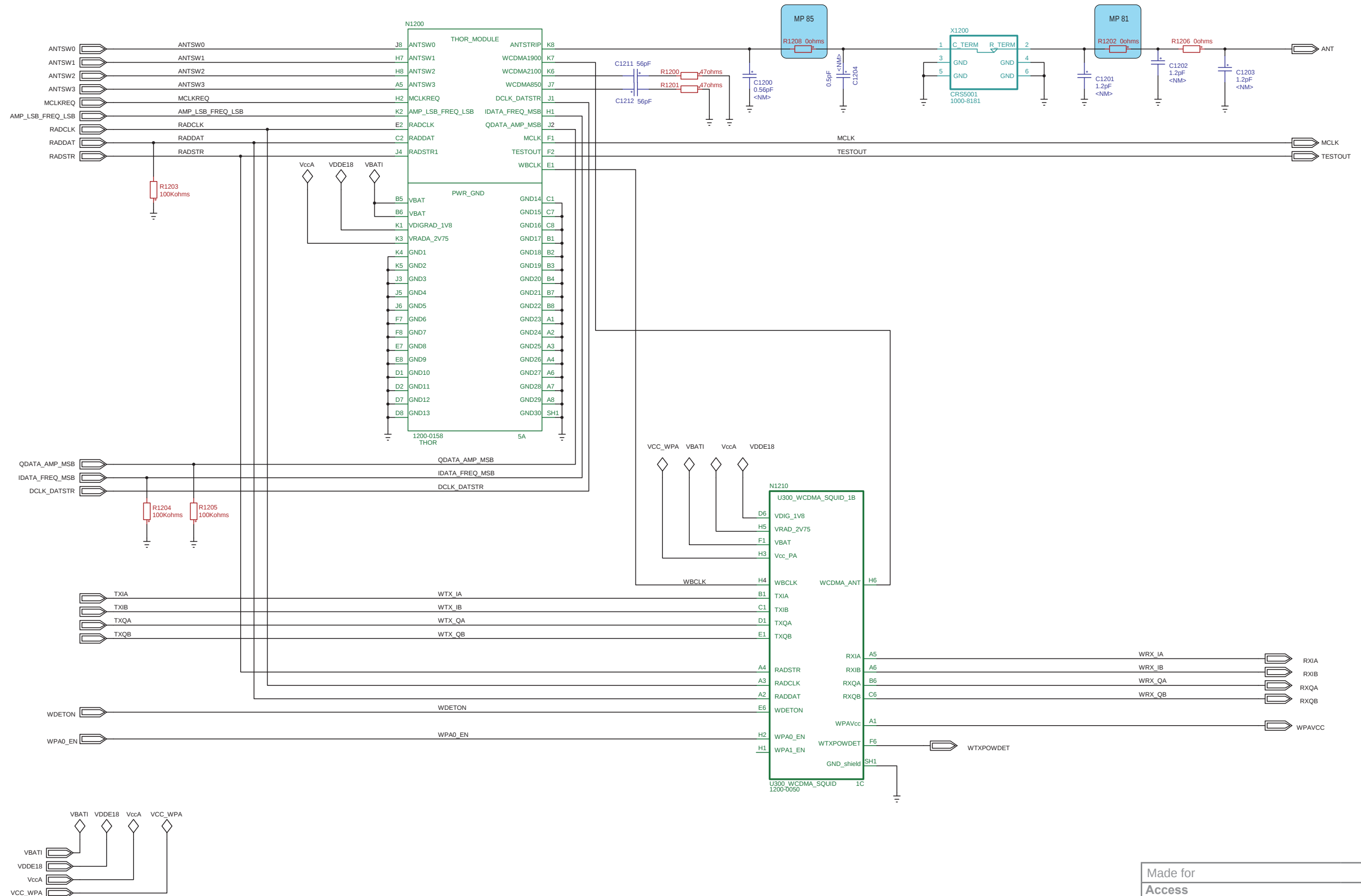


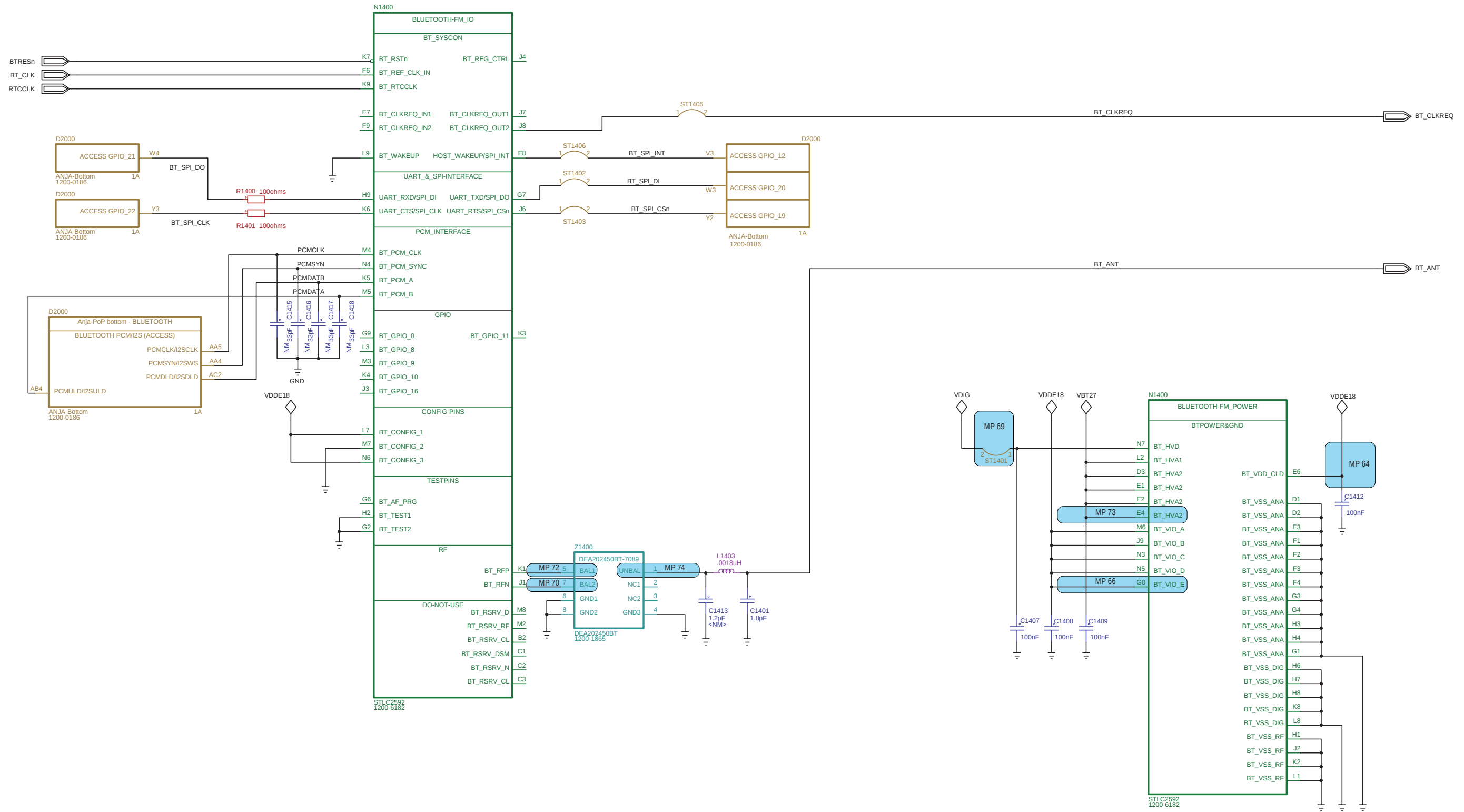


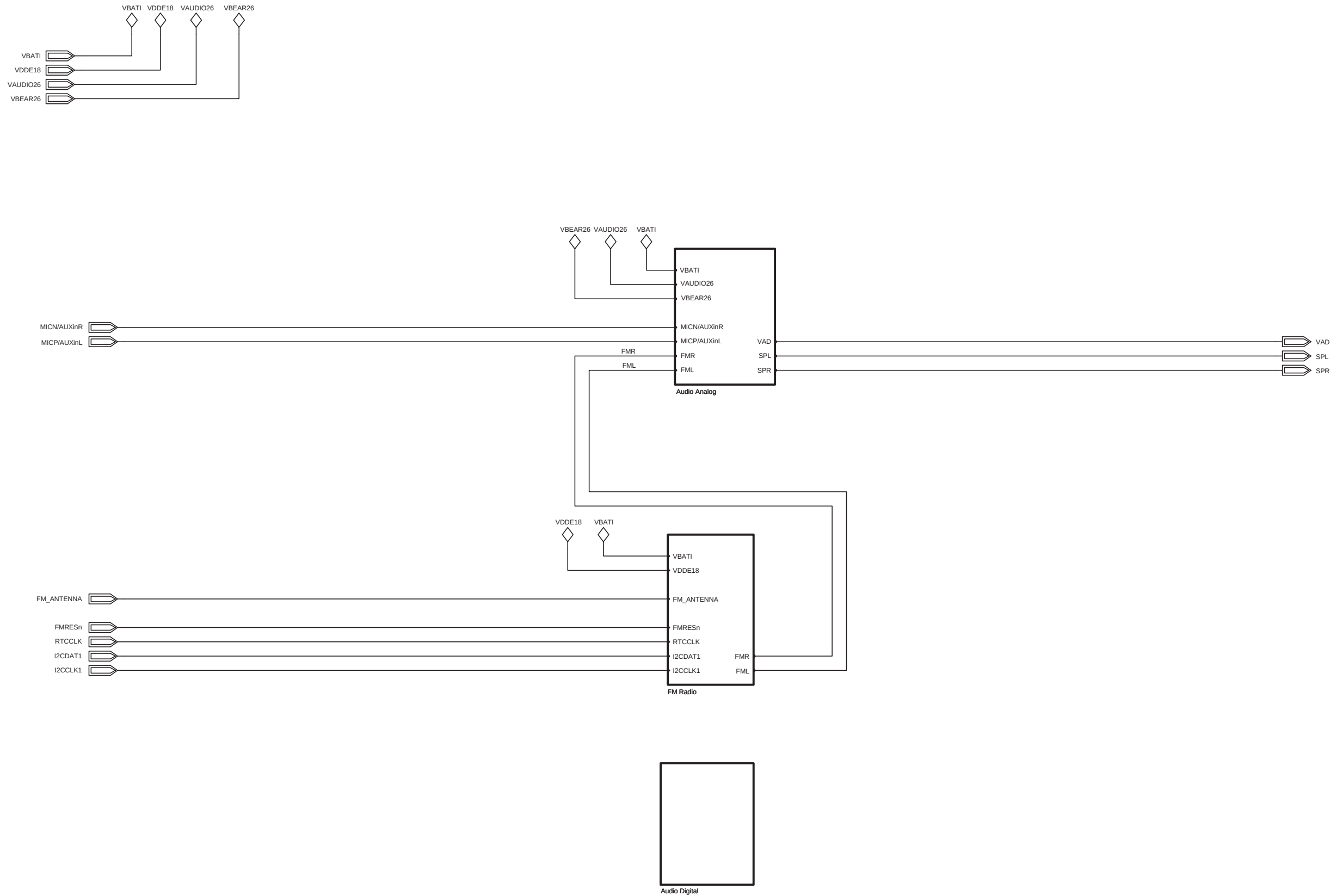
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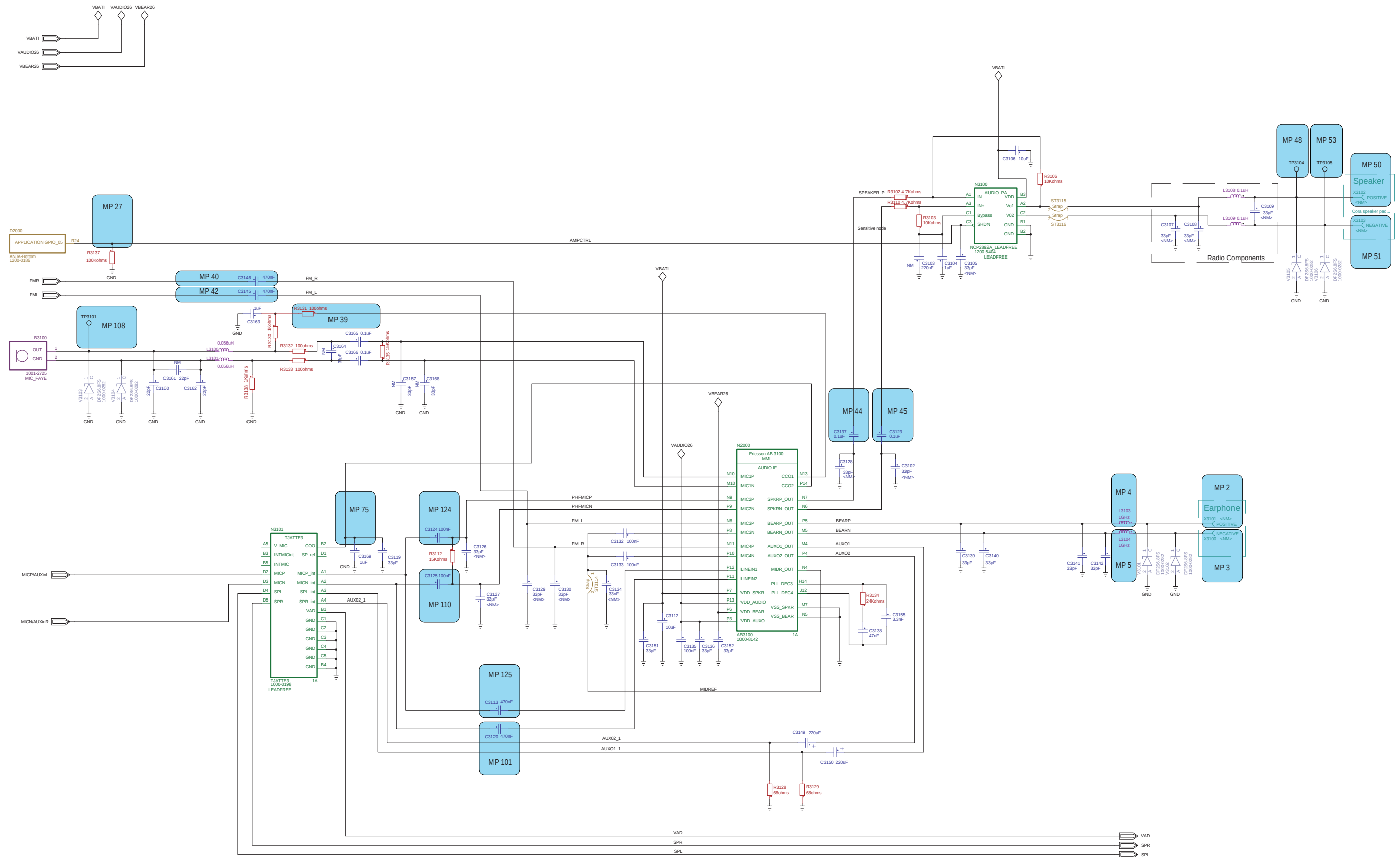


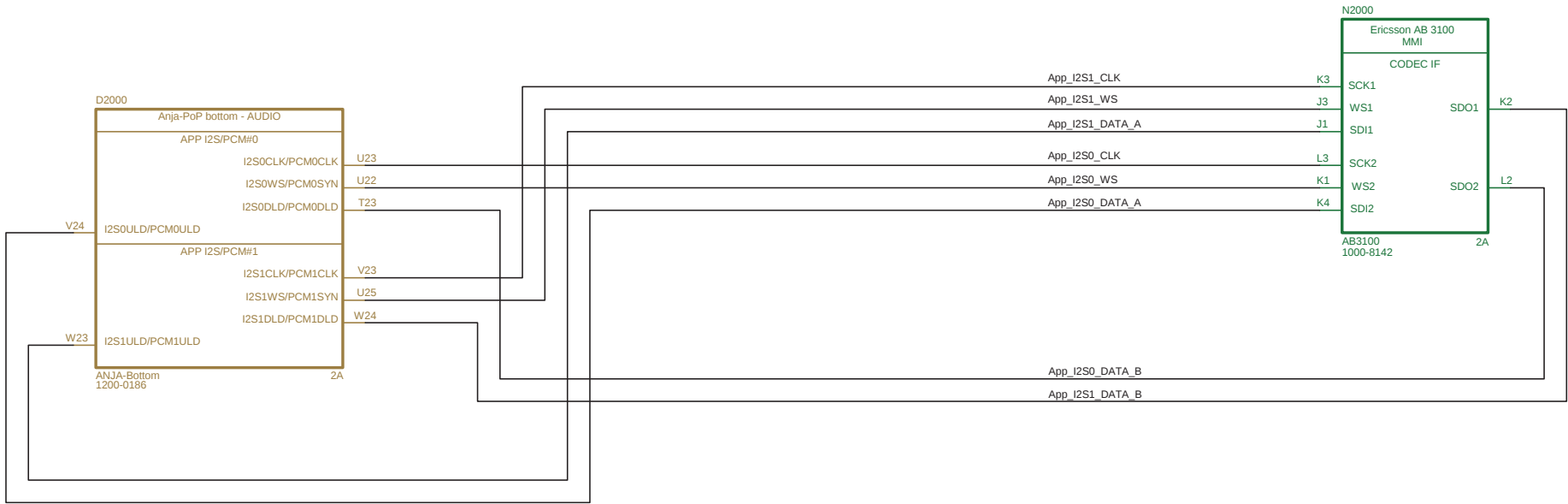




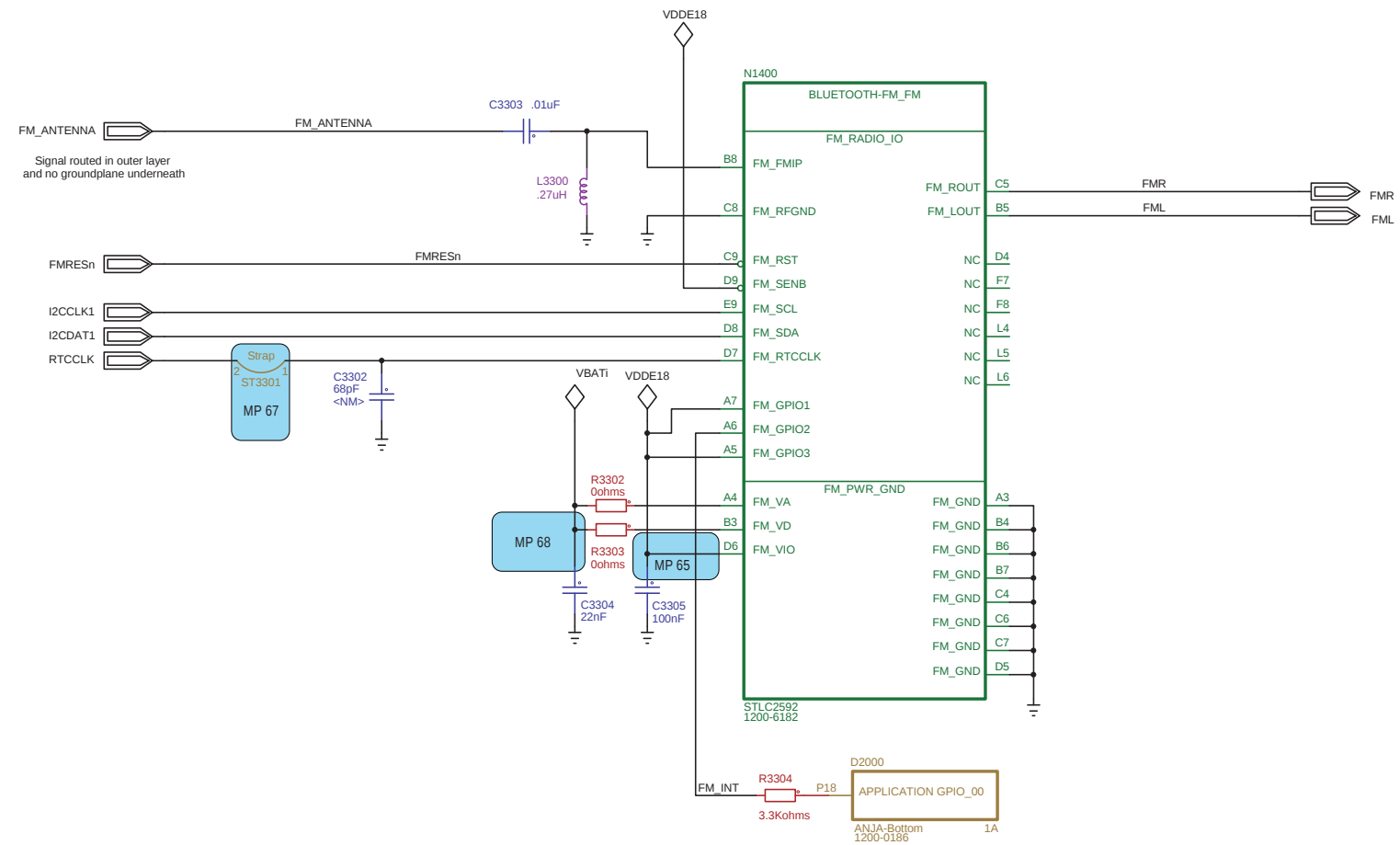
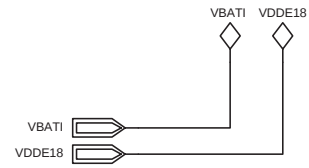


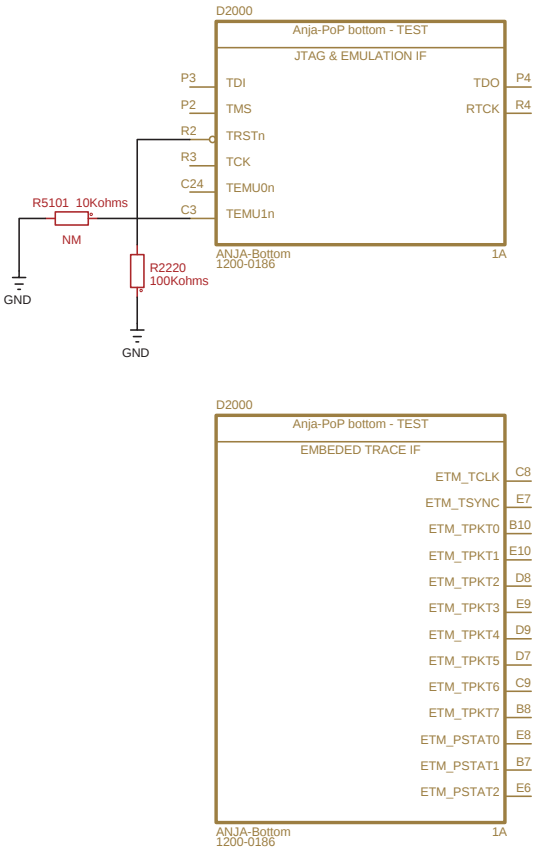
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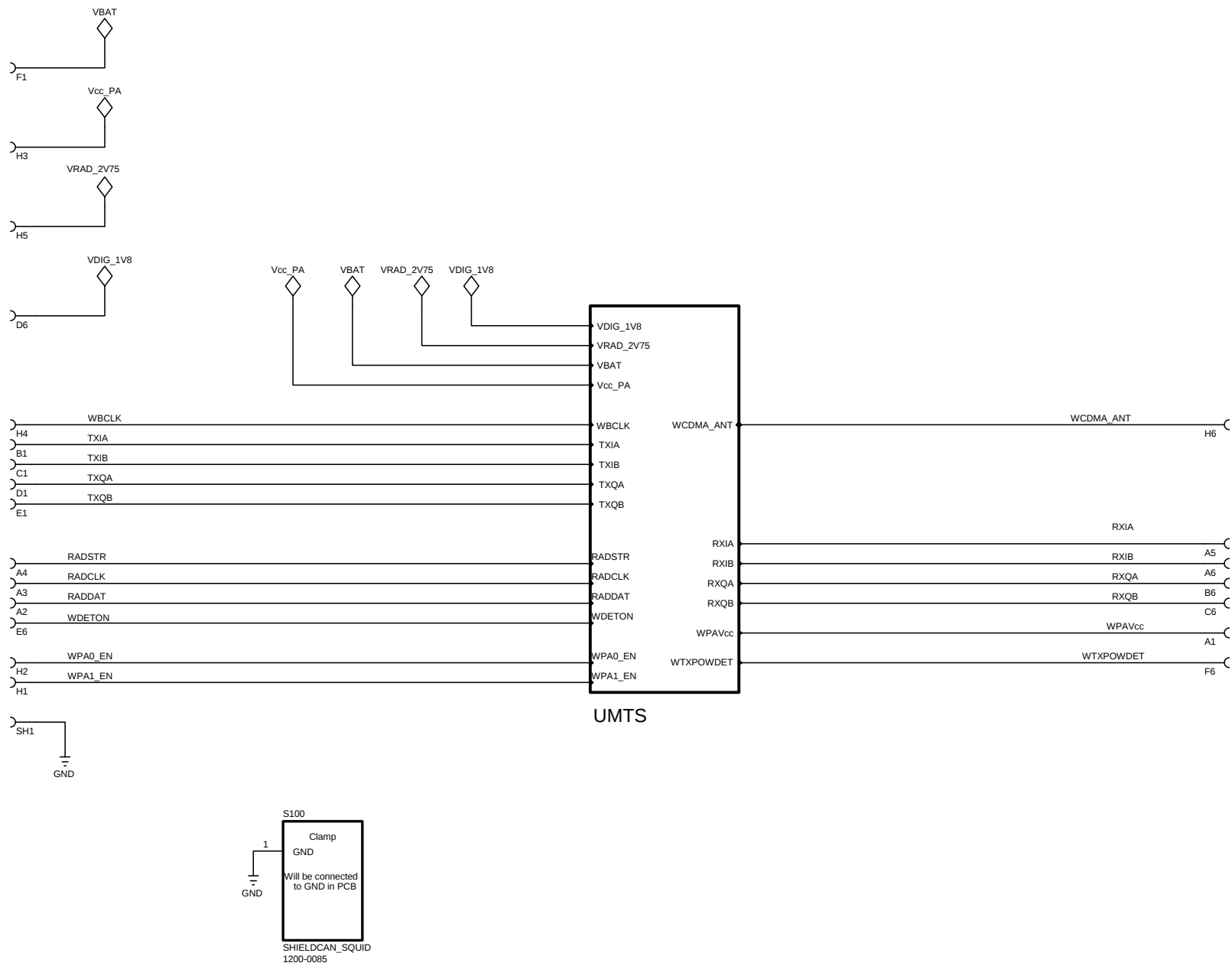




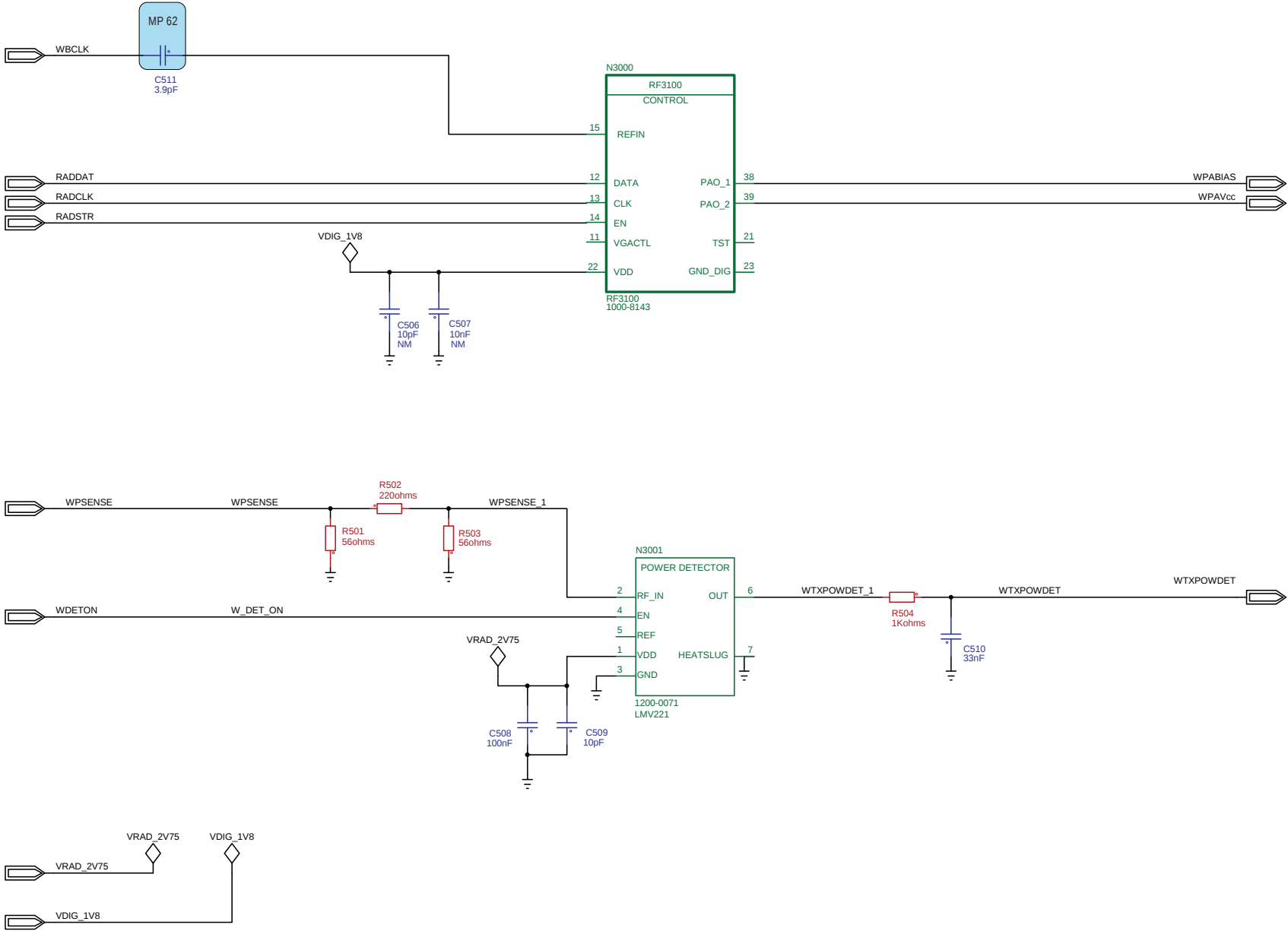
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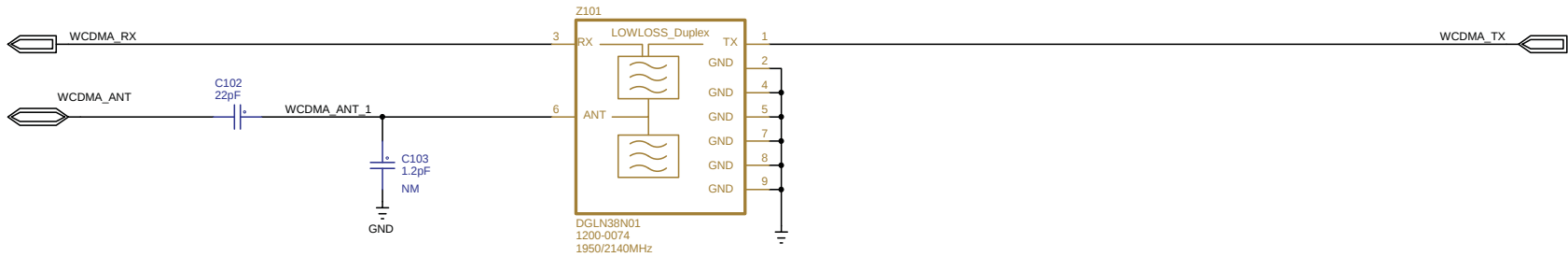




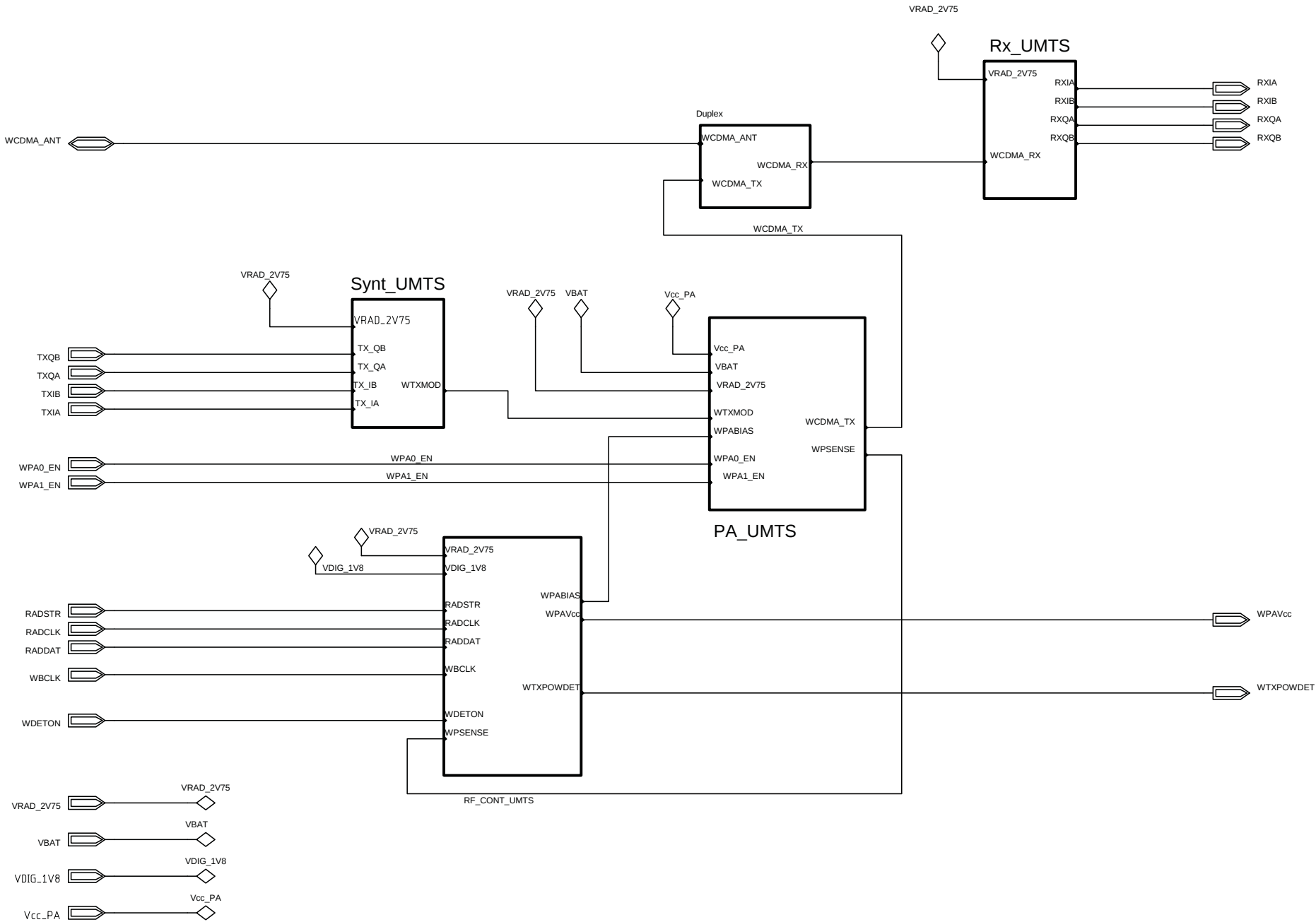
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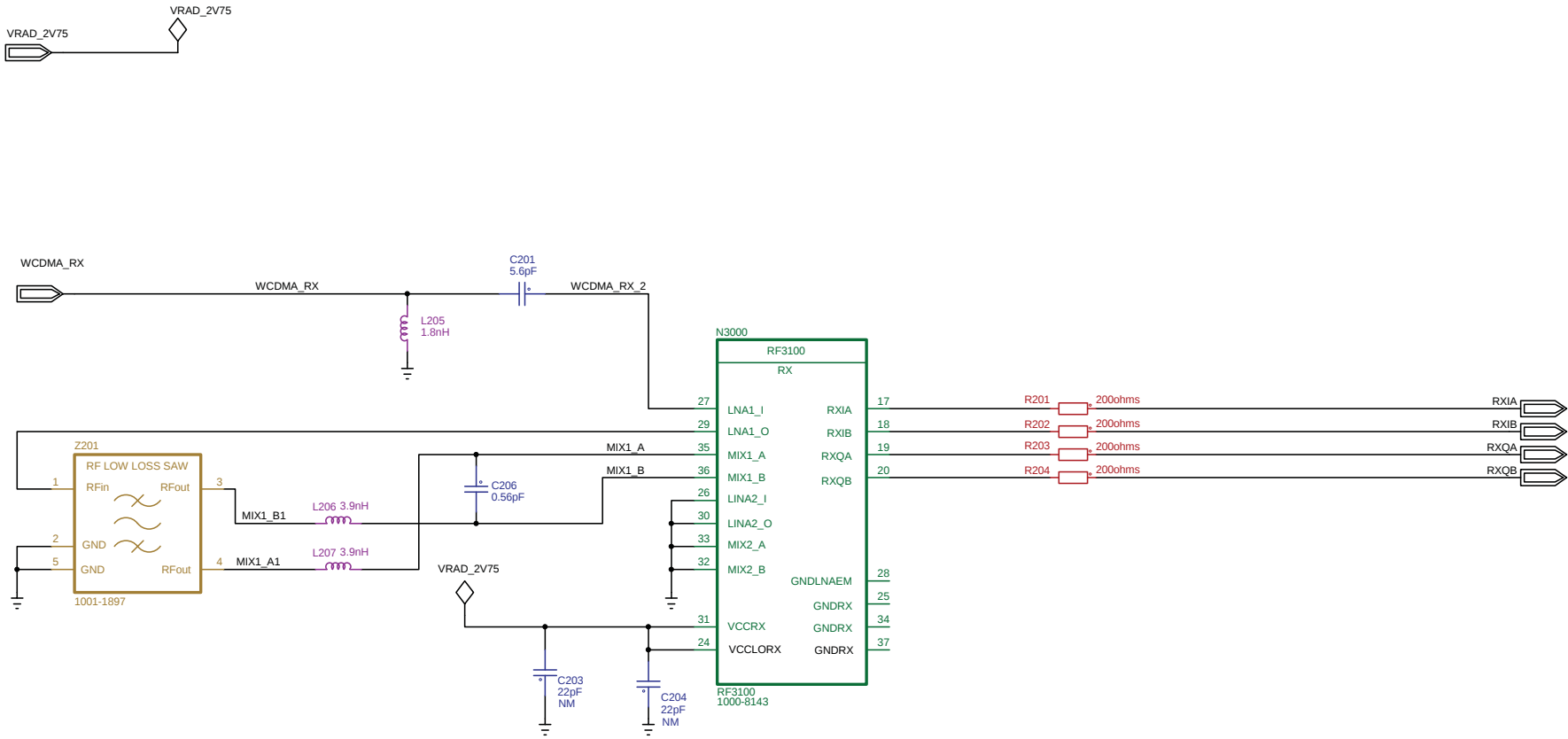


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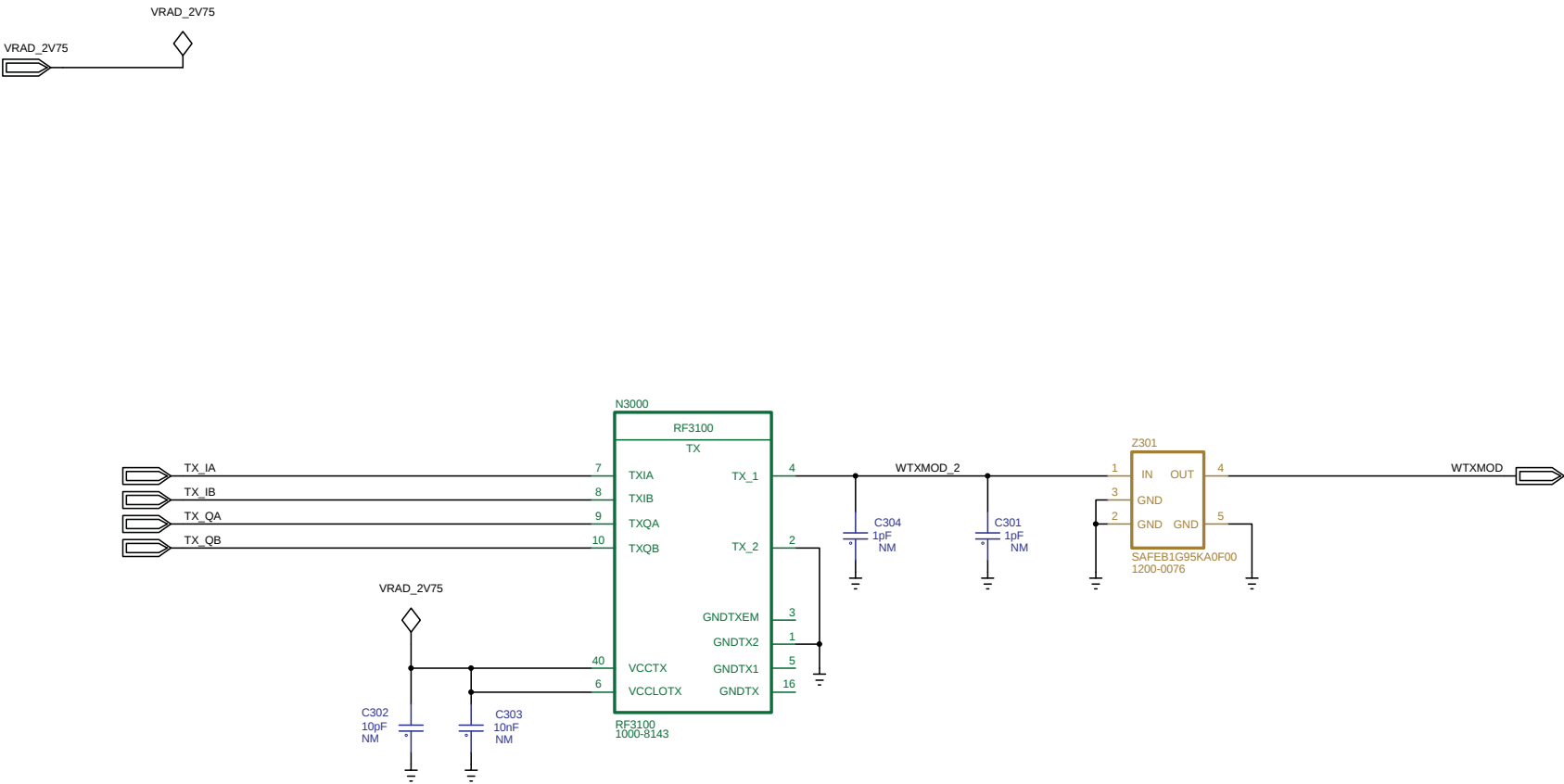


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Squid RF Module	
Radio Receiver UMTS	
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Squid RF Module	
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