Version	Date	Change Descripton
R0A	2014/07/01	Base on BRCM BCM43431MCH2 p.101 ref design
R01	2014/11/21	C19, C17, C66 change from 10pF to 1000pF C94, C107, C143, C159 = 1000pF

11b/g/n 3X3 Mini PCIe Card

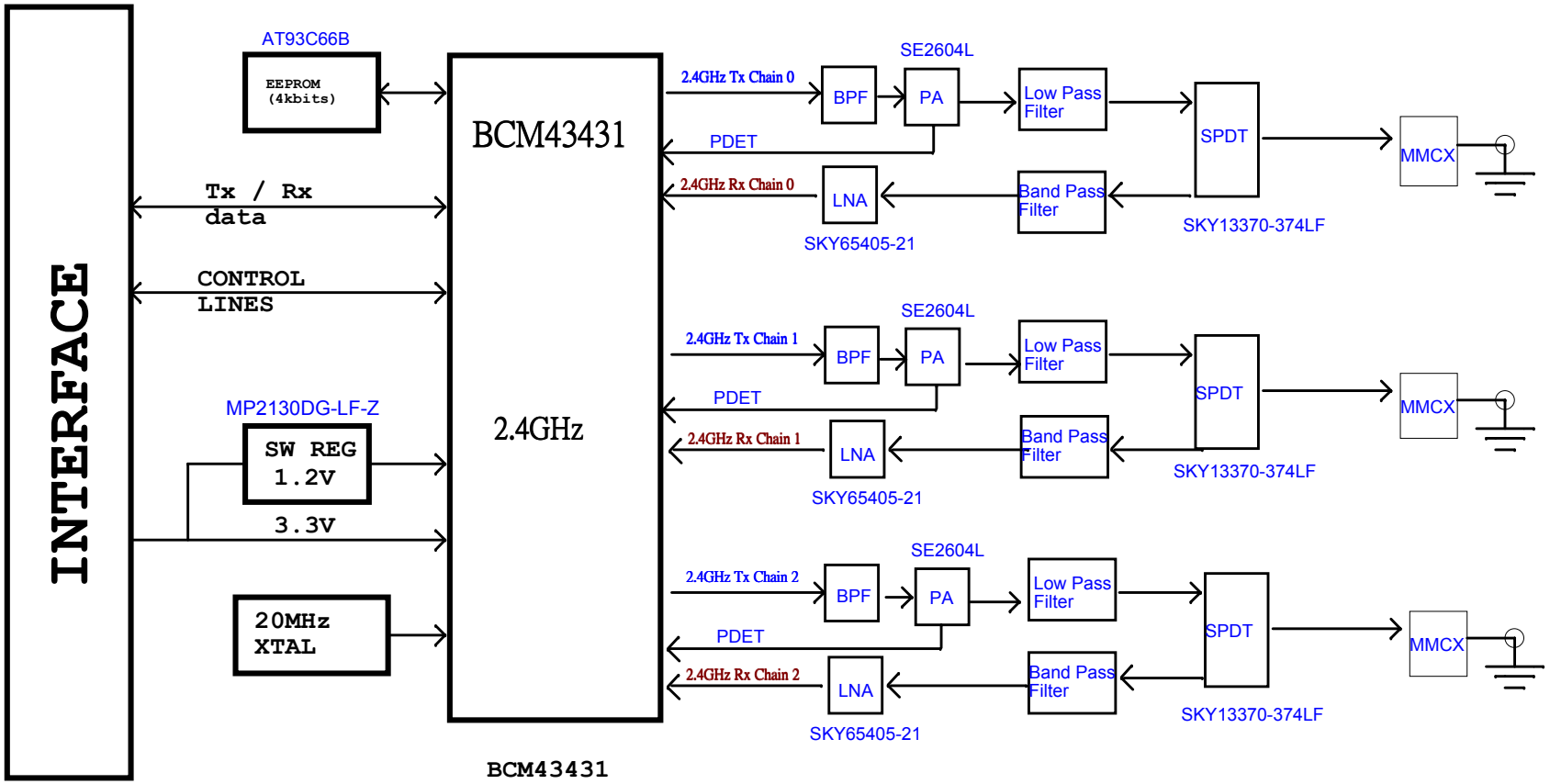
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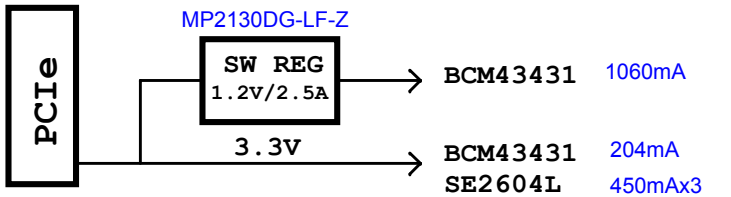
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Power tree

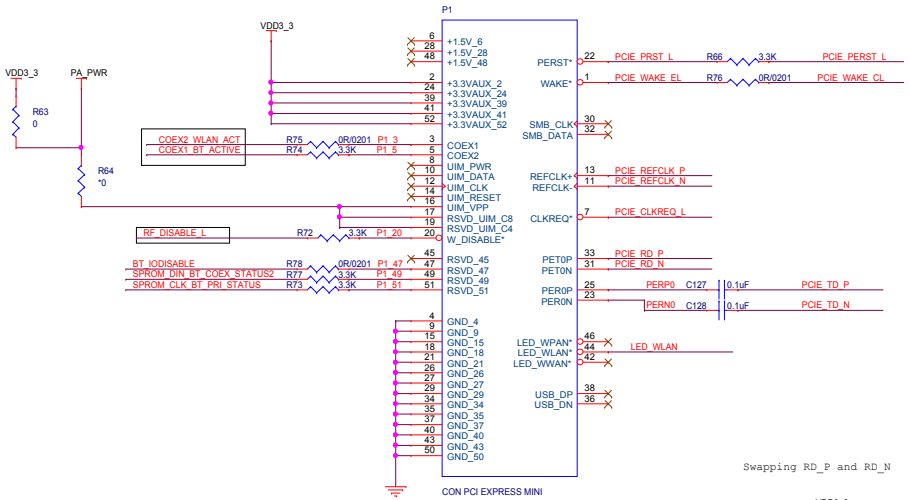


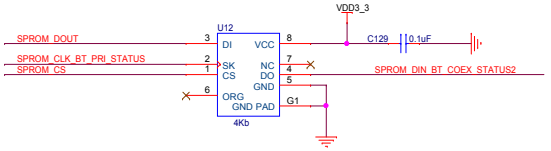
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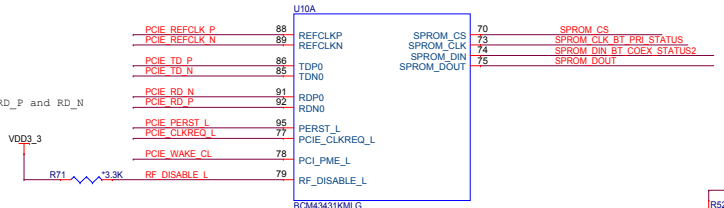
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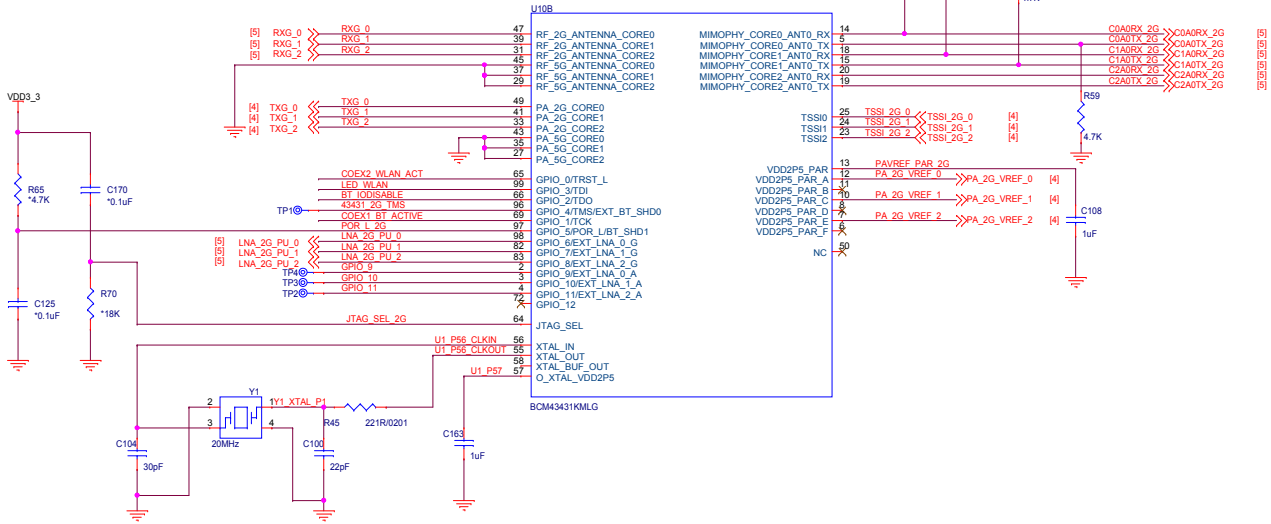
Pad	default	description
mimophy_core0_ant0_rx	0	1: select the clock derived by dividing the ALP clock by PmuControl.llpDiv.
mimophy_core0_ant0_tx	1	0: OTP not present 1: OTP present
mimophy_core1_ant0_rx	0	0: 20MHz Xtal selected 1: 40MHz Xtal selected
mimophy_core1_ant0_tx	0	0: SRPOM not present 1: SRPOM present







Swapping RD_P and RD_N



Power Sequence Timing

The recommended power-up sequence is to bring up the power supplies in the order of the rated voltage. This means that the 3.3V power supply should be powered up first, followed by the 1.2V supply. The recommended power-up sequence, which is illustrated in Figure 11, minimizes the possibility of a latchup condition. The power-up timing parameters are shown in Table 17.

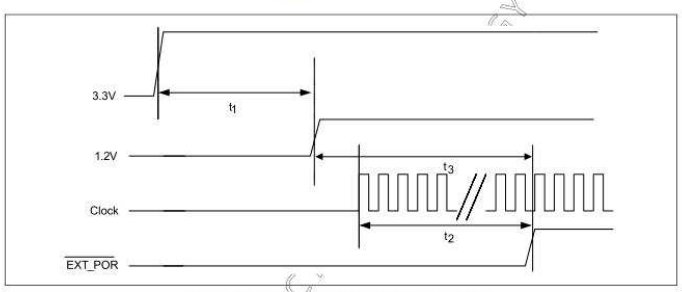


Figure 11: Power-Up Sequence Timing Diagram

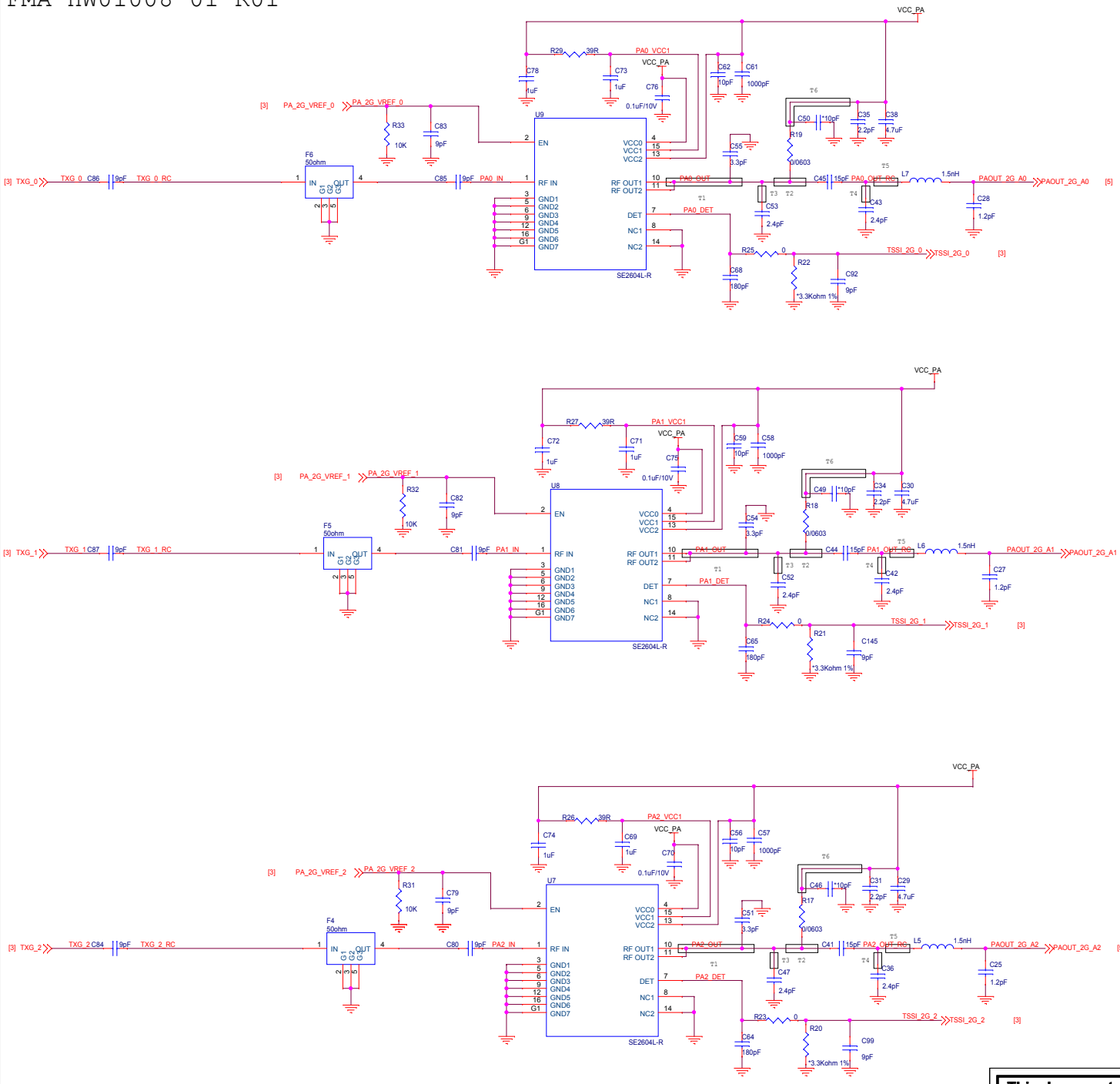
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Layout Notes:

If these notes are not followed exactly, then the PAs will perform badly! The part placement at the output of the PAs should follow the same structure and orientation as shown on the schematic. All resistors, capacitors, and inductors are 0402 size unless otherwise noted. Use the layout of the BCM943222mpgepa or BCM947186nrh boards as a reference.

C283/C307/C3312 should be placed as close to U15/U16/U17 as DFM rules will allow. The center of the C283/C307/C331 pad should be placed right on the center line of the T1 trace.

T1:L = 0.97mm (38.0mils), 50ohm impedance
T1 length is measured from the outside edge of the U15/U16/U17 leads to the long axis center-line of C283/C307/C331. (The center point of where the T3 trace joins the T1-T2 trace.)

T2:L = 1.7mm (66.9mils), 50ohm impedance
T2 length is measured from the long axis center-line of C289/C313/C339 (the center point of where the T3 trace joins the T1-T2 trace) to the center of the C286/C310/C334 land pad.

T3:L = 0.94mm (37.2mils), 50ohm impedance
T3 length is measured from the center line of the T1-T2 trace to the center of the C289/C313/C339 land pad.

R157/R164/R171 is 0603 size and is placed 1.66mm (65.5mils) away from U15/U16/U17. This dimmension is measured from the outside edge of the U15/U16/U17 leads to the long axis center-line of R157/R164/R171. The outer edge of the R157/R164/R171 land pattern should be aligned with the center of the T1-T2 trace.
The long axis center line of C290/C314/C340 is centered on the center point of the C286/C310/C334 pad.

T4:L = 0.94mm (37.2mils), 50ohm impedance
T4 length is measured from the center line of the T5 trace to the center of the C290/C314/C340 land pad.

T5:L = 0.98mm (38.4mils), 50ohm impedance
T5 length is measured from the center of the C286/C310/C334 land pad to the center of the L9/L12/L15 land pad.
C364/C385/C406 is placed immediately after L5/L8/L11, as close as DFM rules will allow, with it's top land pad directly on the trace from L5/L8/L11.

T6:L = 4.7mm (185mils), 50ohm impedance
T6 length is measured from the center of the R157/R164/R171 pad to the center of the C281/C304/C329 land pad.

C359/C380/C401 is placed immediately after R157/R164/R171, as close as DFM rules will allow, with it's top land pad directly on the trace from R157/R164/R171 to C281/C304/C329.

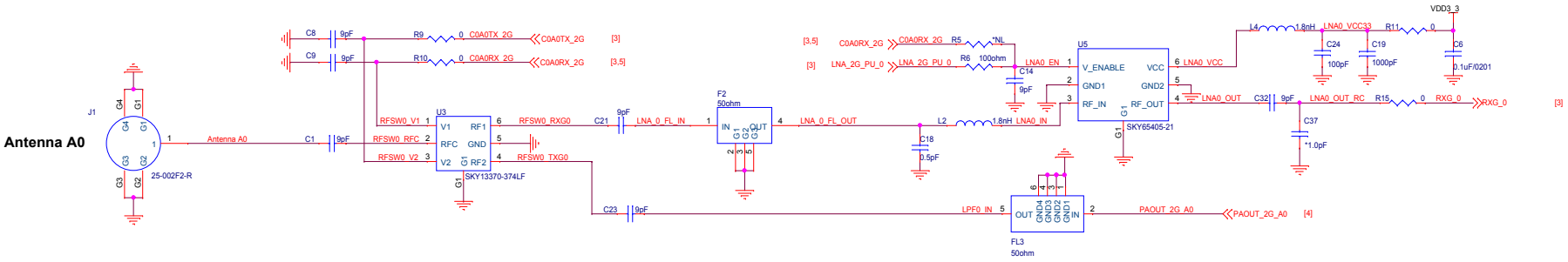
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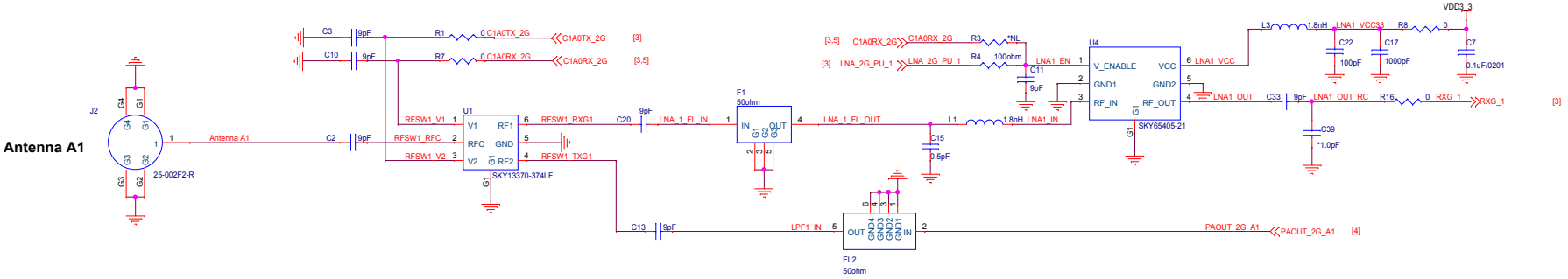
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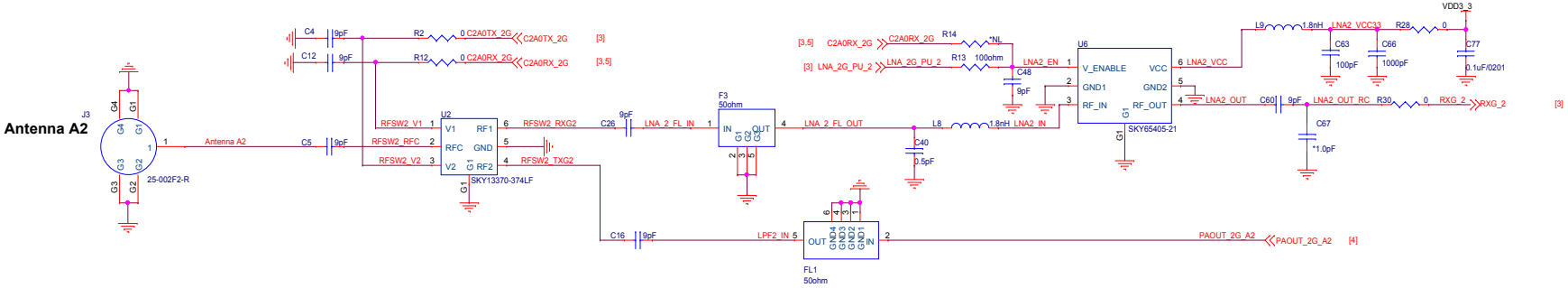
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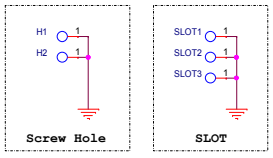
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C	Radio Front End PA	Erick_Chen

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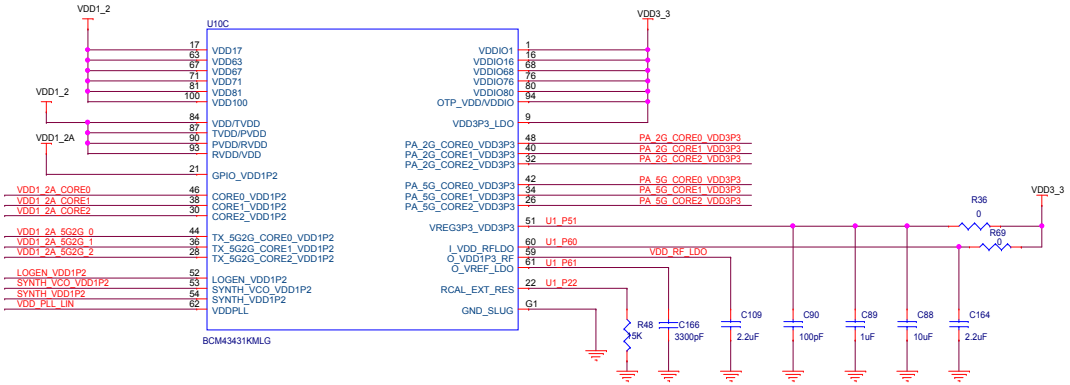
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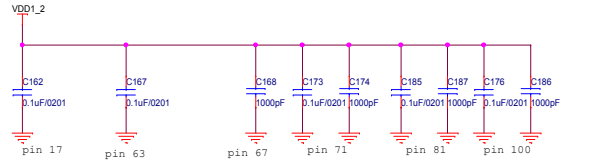
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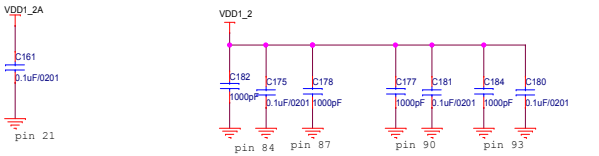
Size	Page Name	Engineer
C	Radio Front End LNA Switch	Erick_Chen

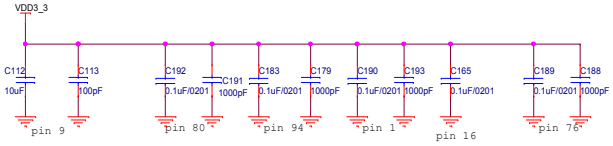
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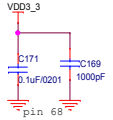
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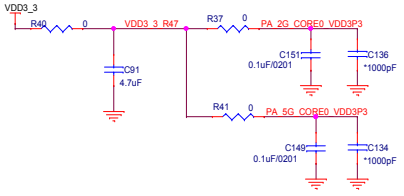


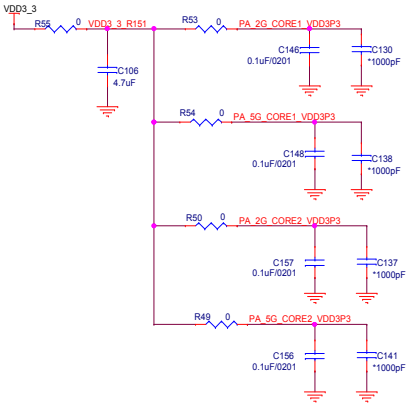


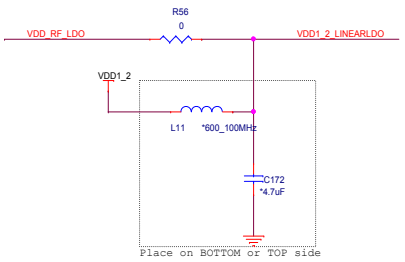


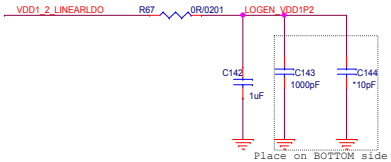


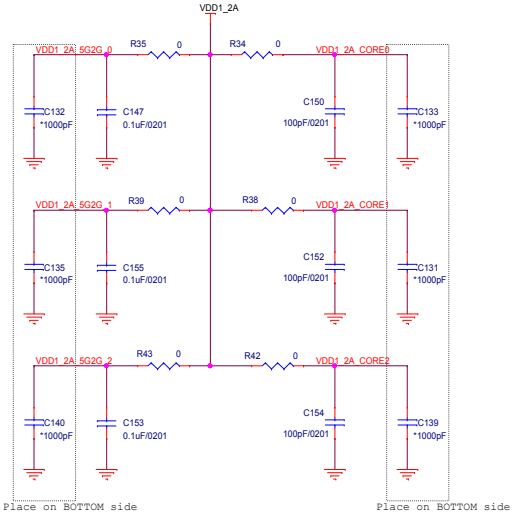


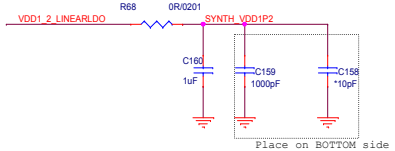


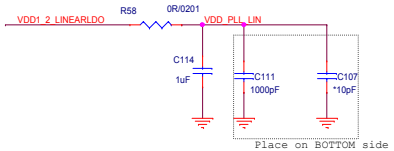


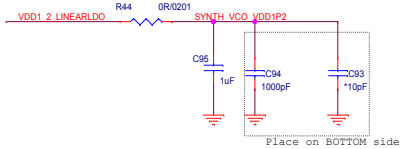


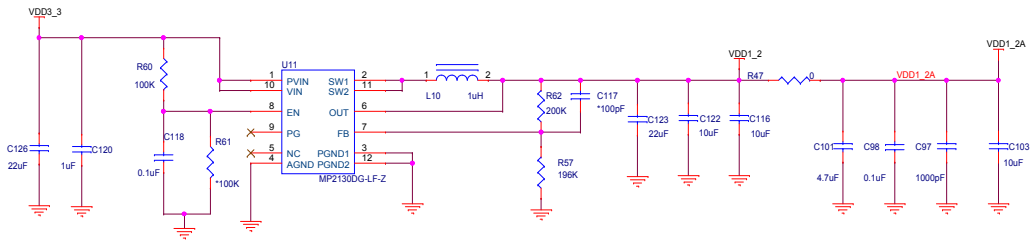


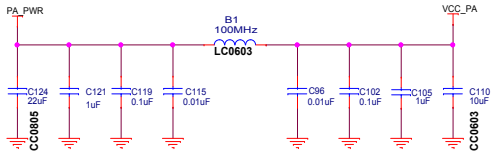












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