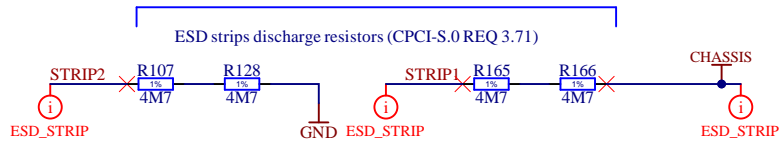
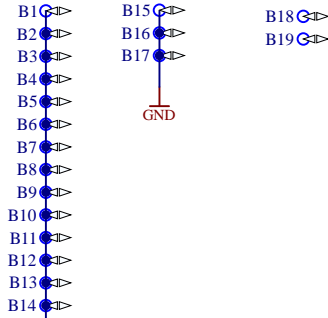


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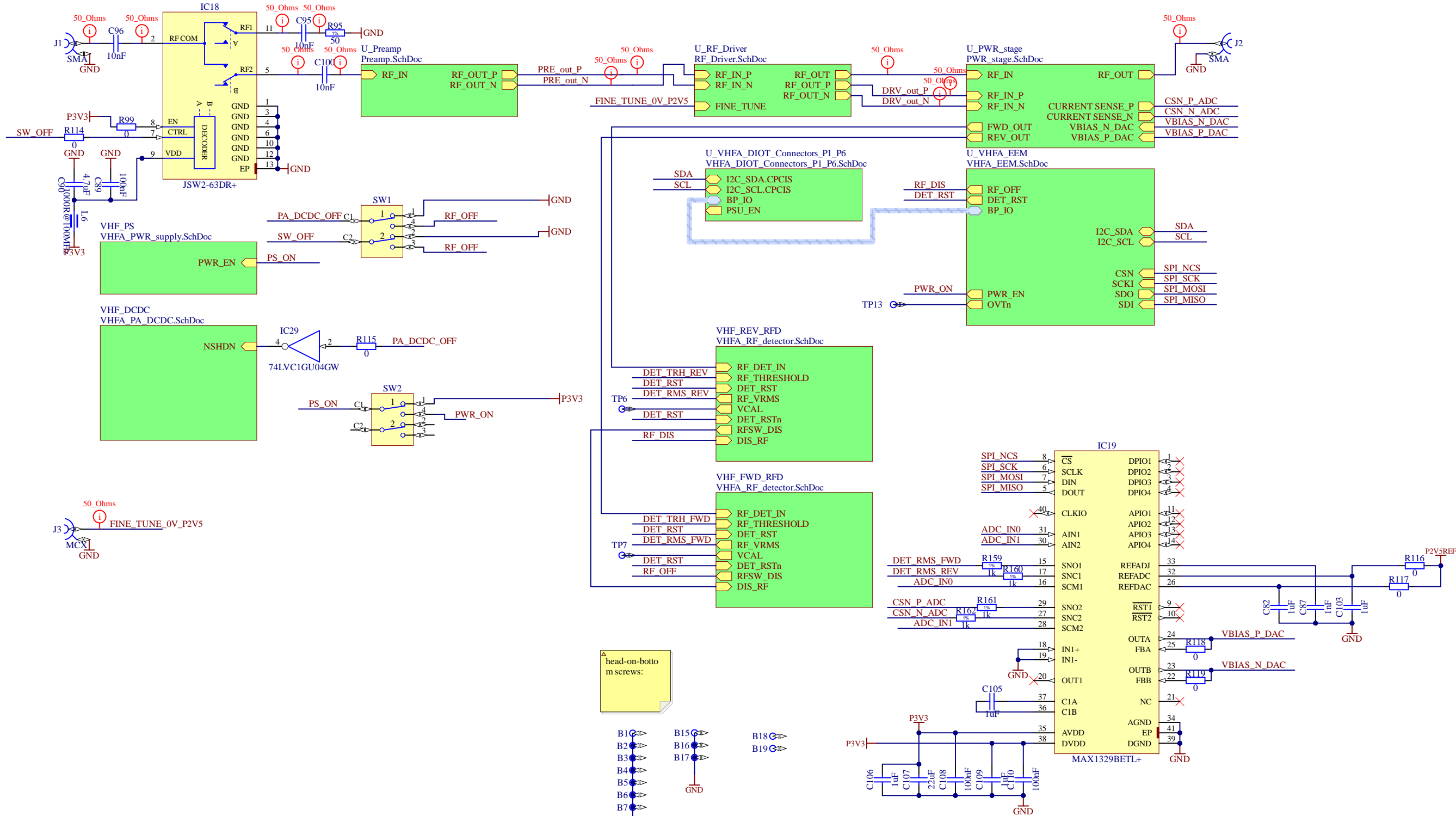
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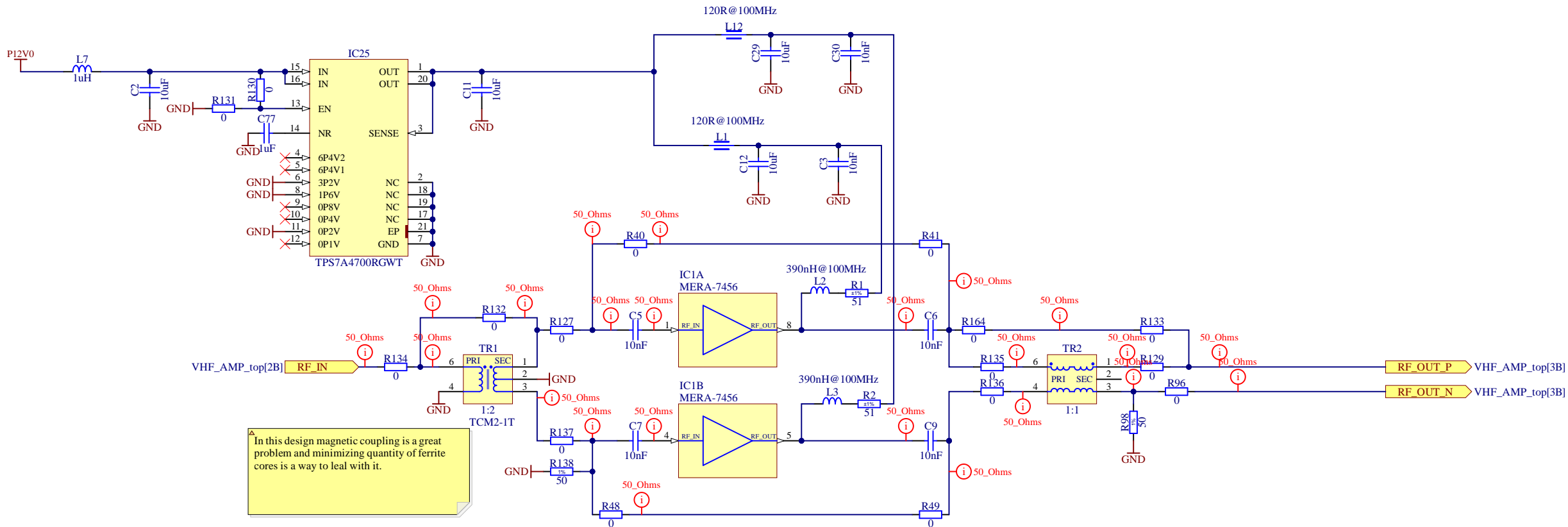


head-on-bottom screws:



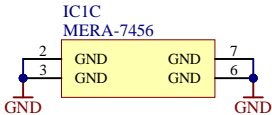
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		Print Date	24.03.2024 23:13:19
		Sheet	1 of 9
*	ISE	ARTIQ	
*		Size	A3
		Rev	*





In this design magnetic coupling is a great problem and minimizing quantity of ferrite cores is a way to deal with it.

R BIAS	
Vcc	"1%" Res. Values (ohms) for Optimum Biasing
7	28.7
8	41.2
9	53.6
10	66.5
11	78.7
12	90.9
13	102
14	115
15	127



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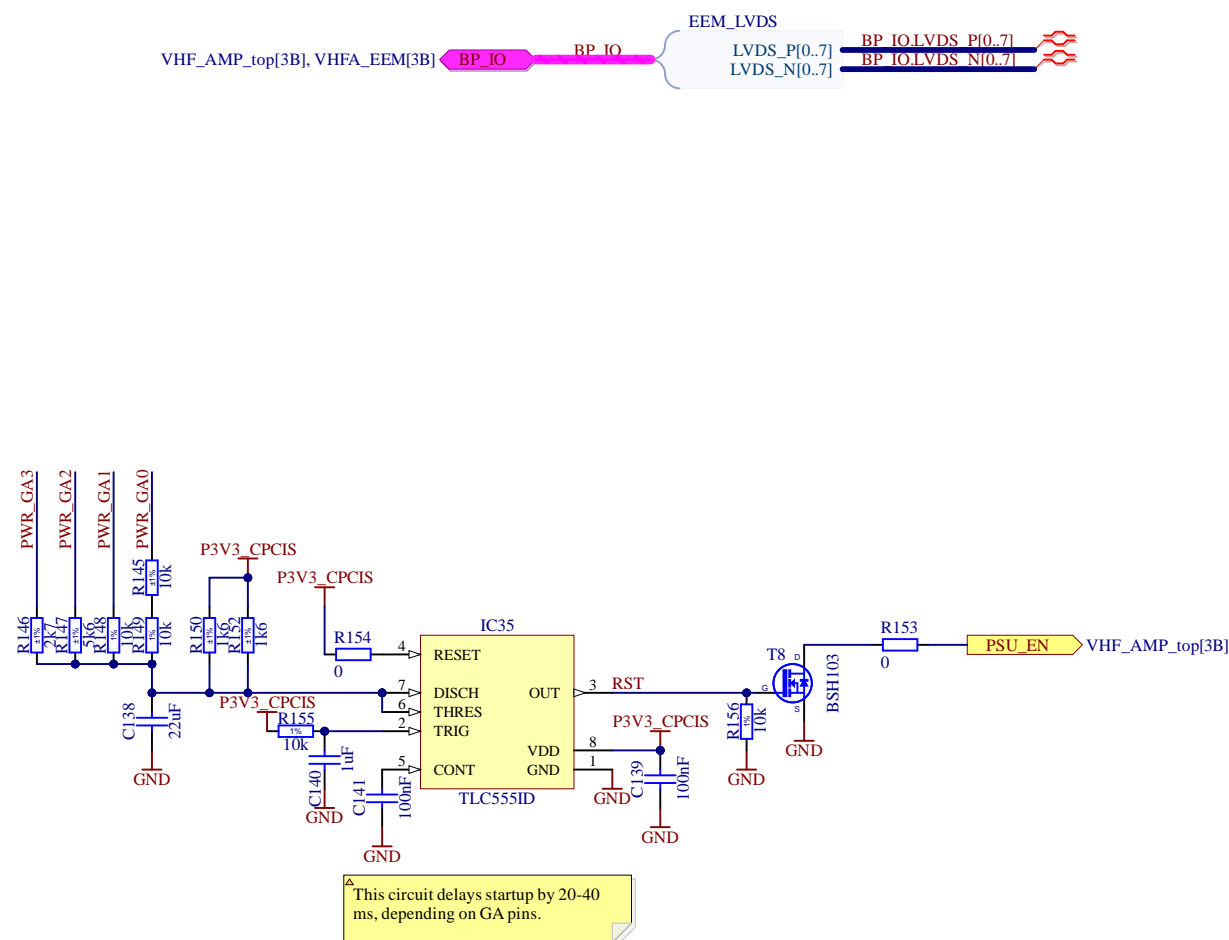
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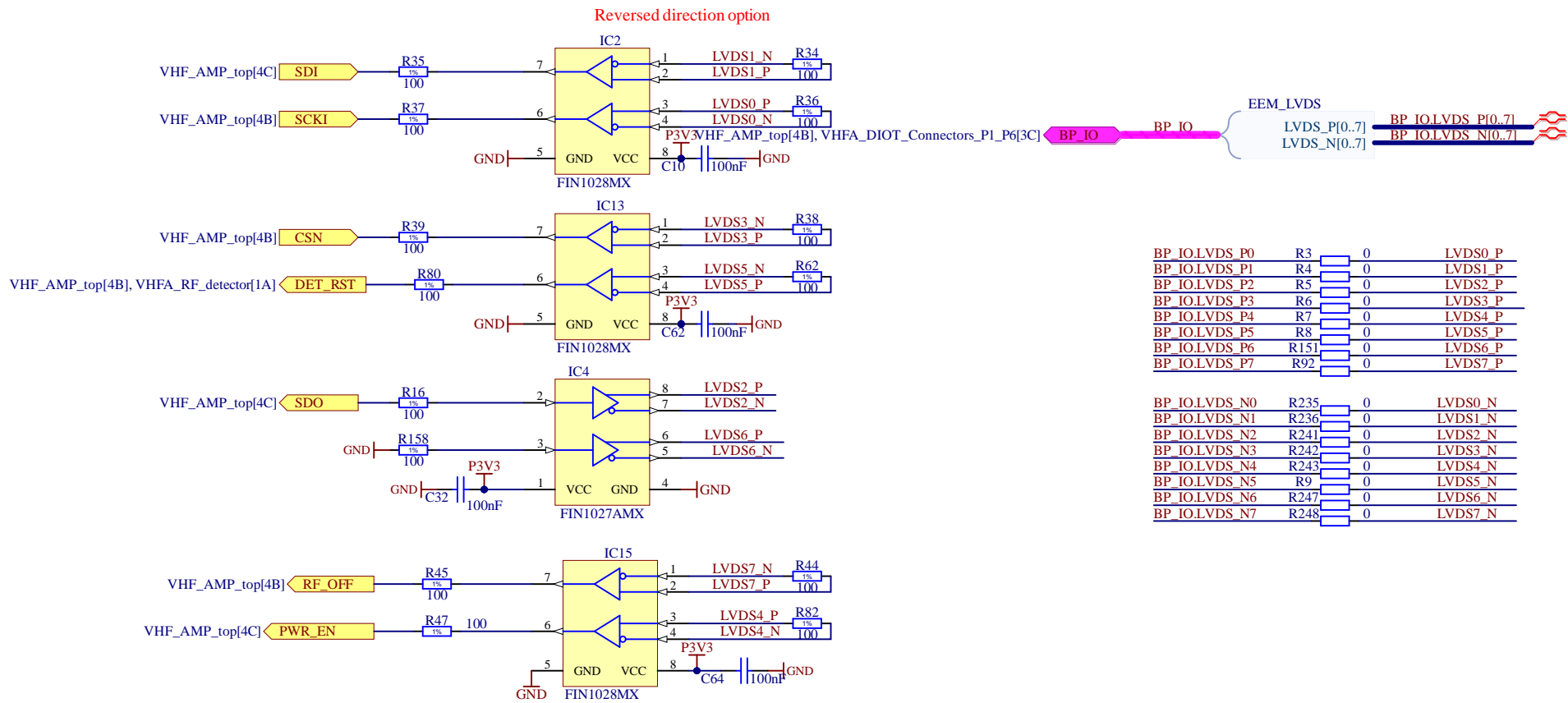
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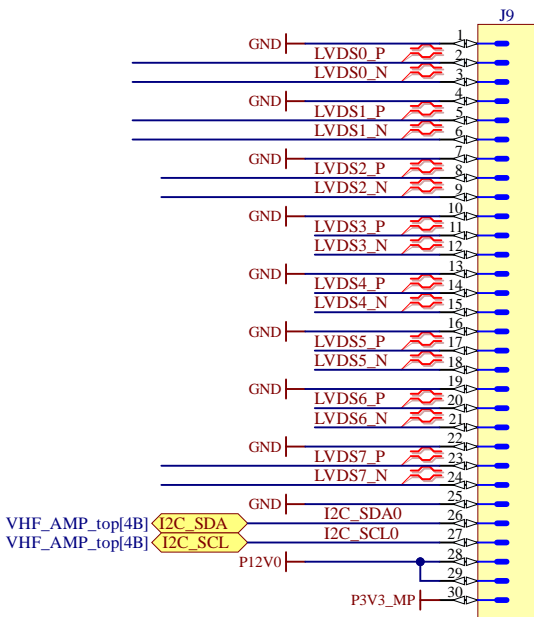
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Document		Designer	shanasz
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		Rev	*



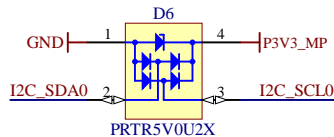
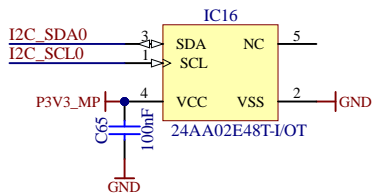
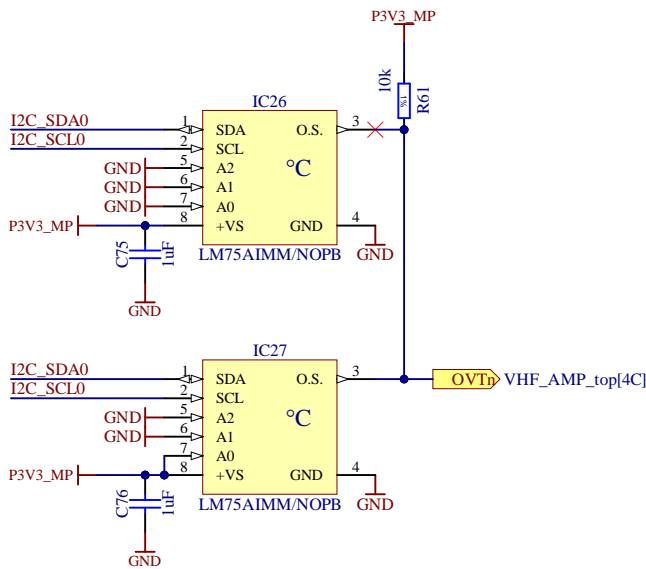




EEM connector: IO are LVDS, I2C is 3V3 LVCMOS, P3V3\_MP up to 20mA, P12V up to 1A



EEM connector: IO are LVDS, I2C is 3V3 LVCMOS, P3V3\_MP up to 20mA, P12V up to 1A

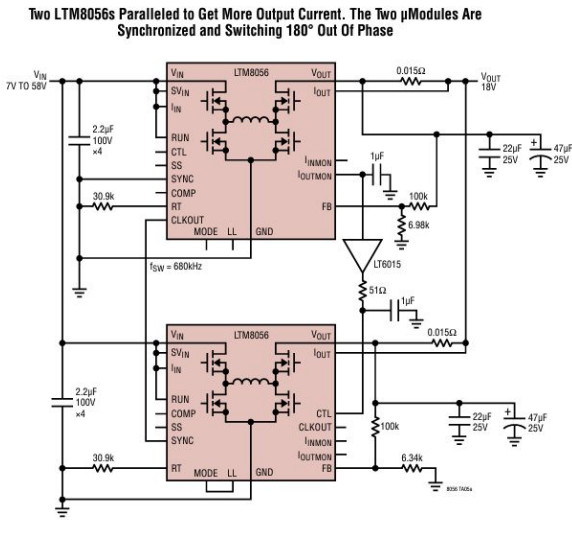
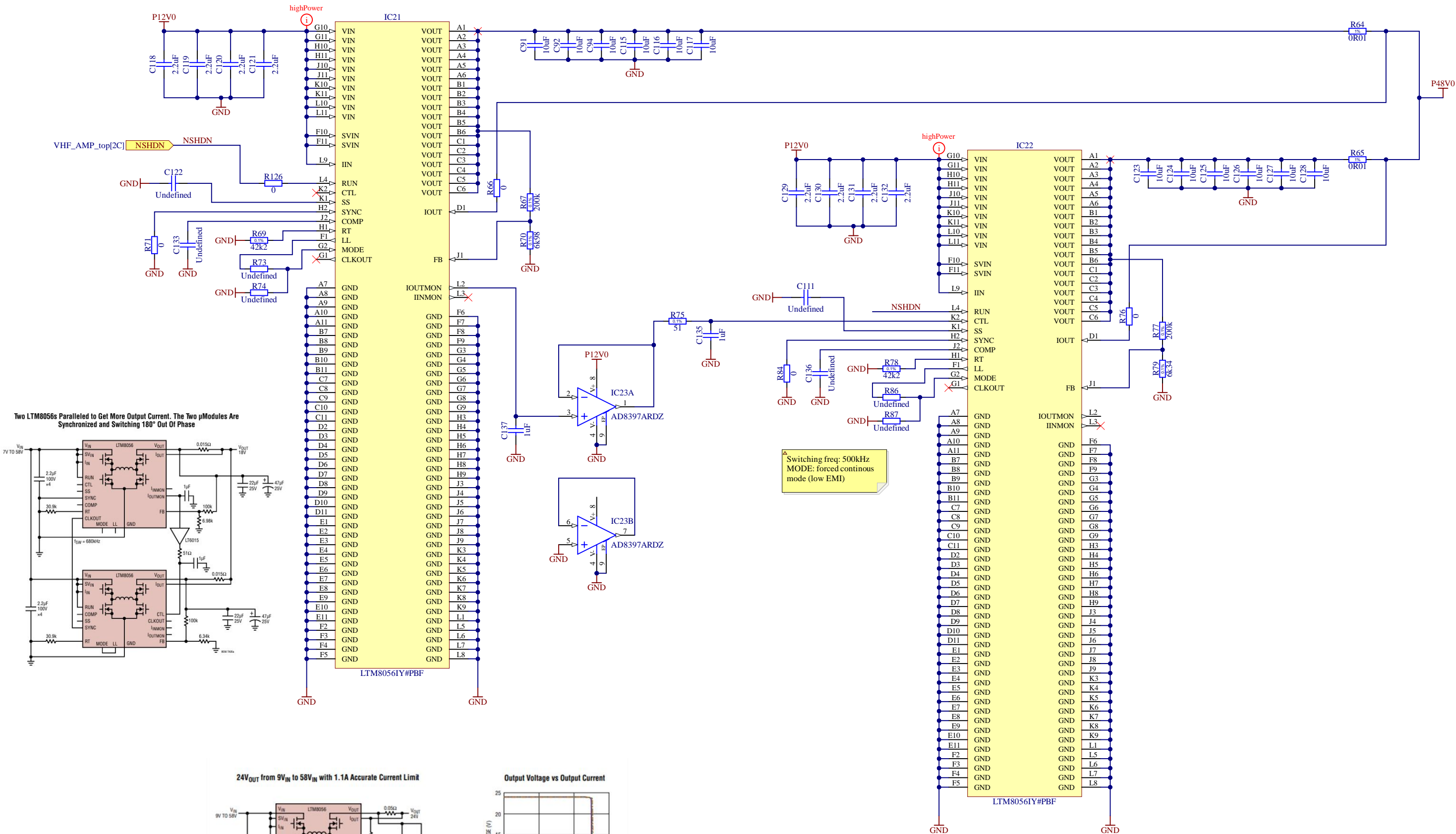


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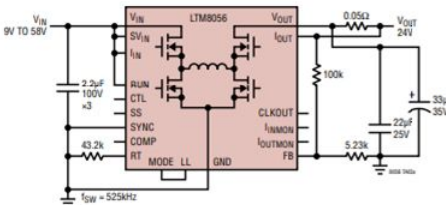
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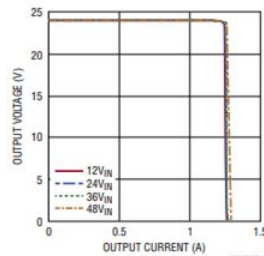




24V<sub>OUT</sub> from 9V<sub>IN</sub> to 58V<sub>IN</sub> with 1.1A Accurate Current Limit



Output Voltage vs Output Current



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Project/Equipment		ARTIQ/SINARA	
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## VHF Amplifier Power Stage Supply

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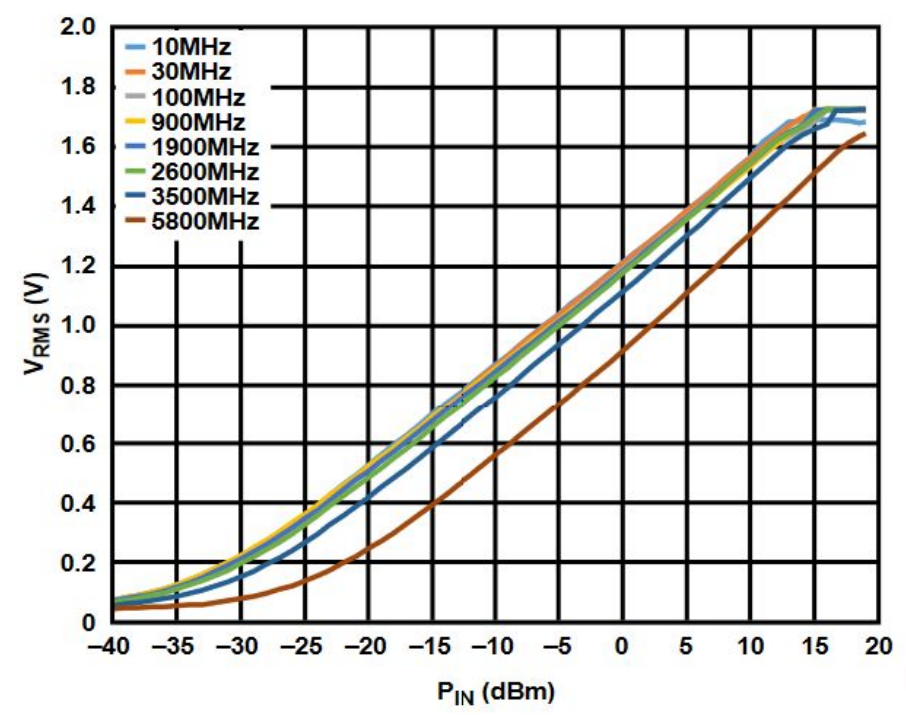
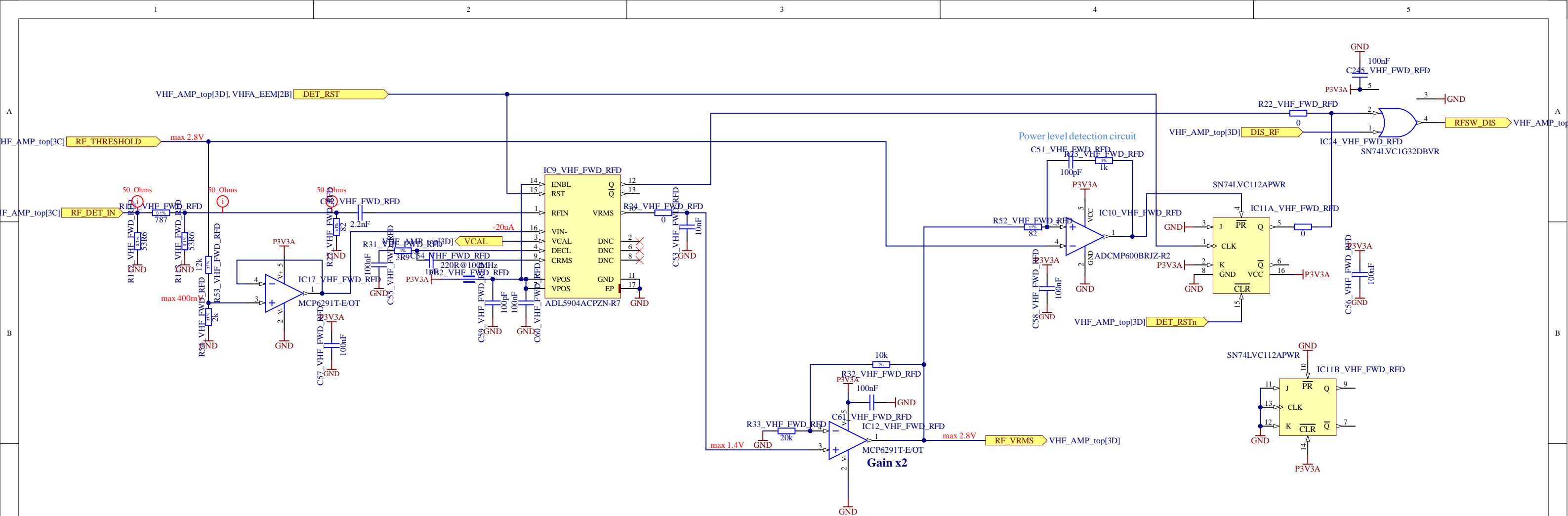


Figure 3.  $V_{RMS}$  vs. Input Level ( $P_{IN}$ ) for Various Frequencies (30 MHz to 6 GHz) at 25°C

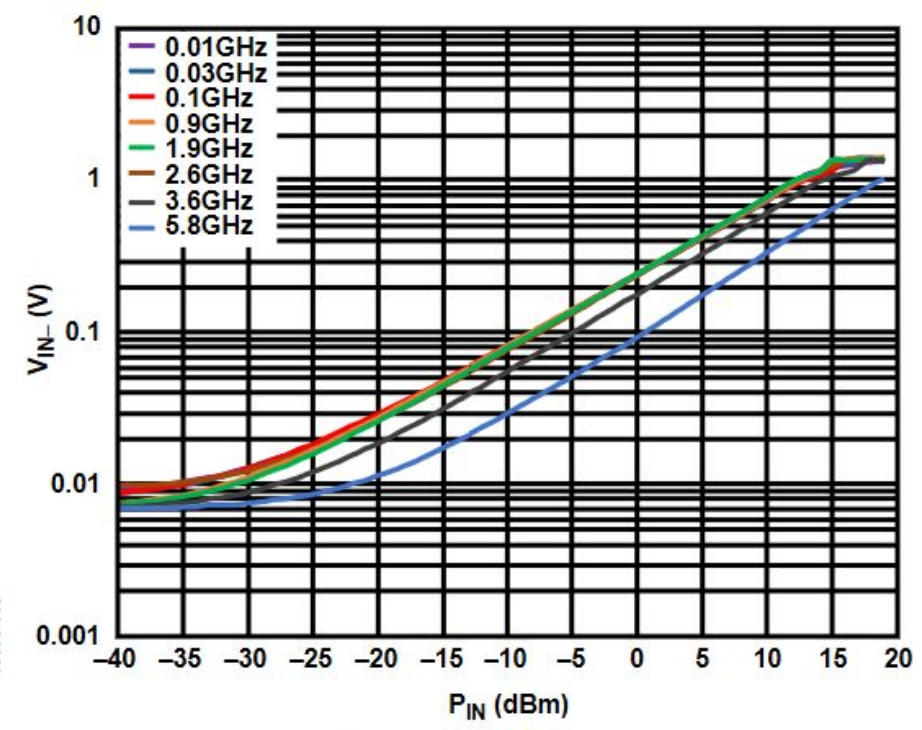


Figure 39.  $V_{IN-}$  vs.  $P_{IN}$  at Various Frequencies

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## VHF Amplifier Power detector & protection

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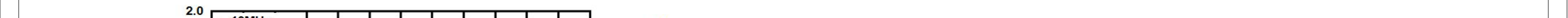
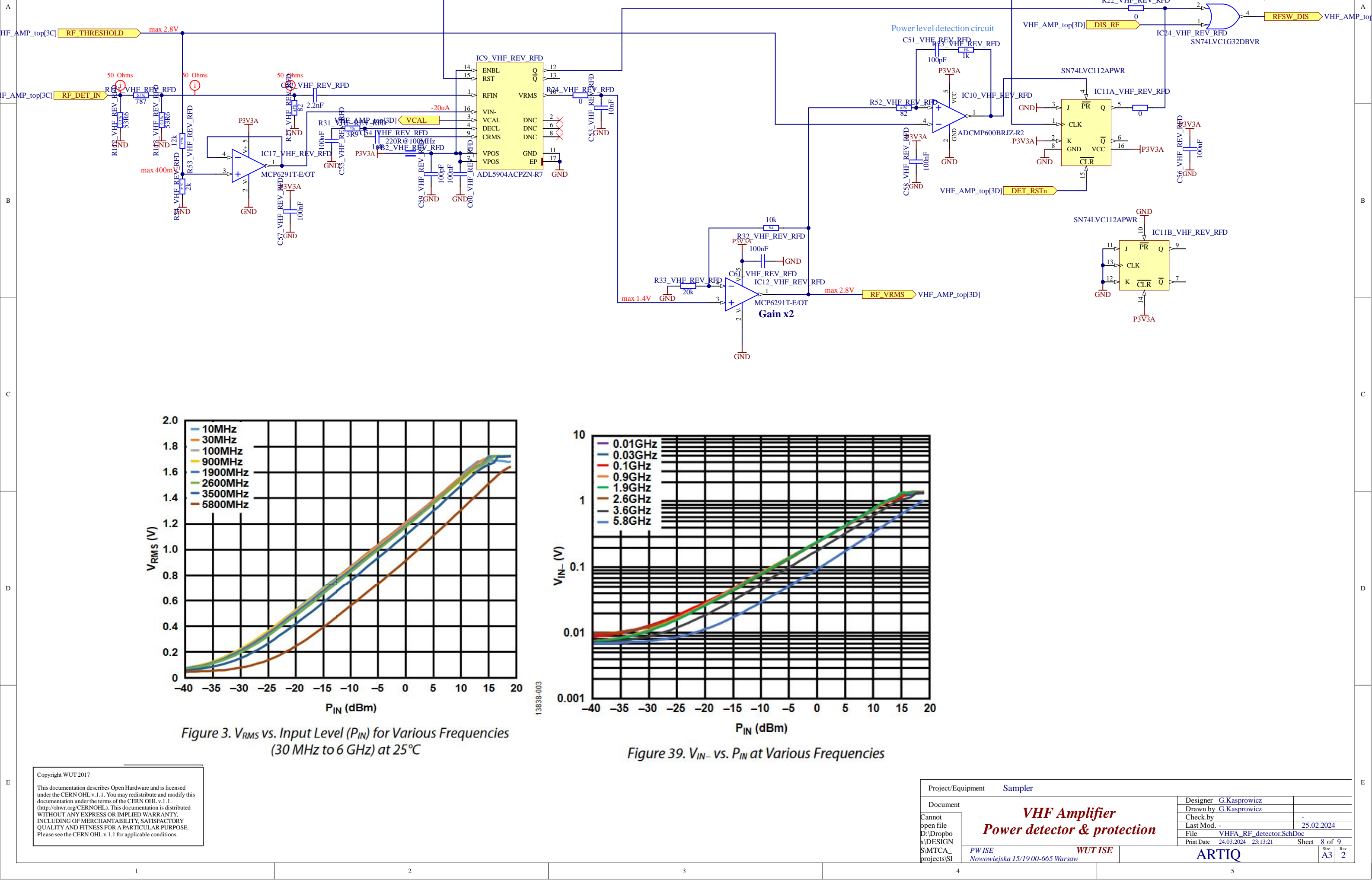


Figure 3.  $V_{RMS}$  vs. Input Level ( $P_{IN}$ ) for Various Frequencies



(30 MHz to 6 GHz) at 25°C

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		F

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		<p><b>VHF Amplifier</b> <b>Power detector &amp; protection</b></p>	<table border="1"> <tr> <td>Designer</td> <td>G.Kasprowicz</td> </tr> <tr> <td>Drawn by</td> <td>G.Kasprowicz</td> </tr> <tr> <td>Check by</td> <td>-</td> </tr> <tr> <td>Last Mod.</td> <td>25.02.2024</td> </tr> <tr> <td>File</td> <td>VHFA_RF_detector.SchDoc</td> </tr> <tr> <td>Print Date</td> <td>24.03.2024 23:13:21</td> </tr> <tr> <td>Sheet</td> <td>8 of 9</td> </tr> </table>	Designer	G.Kasprowicz	Drawn by	G.Kasprowicz	Check by	-	Last Mod.	25.02.2024	File	VHFA_RF_detector.SchDoc	Print Date	24.03.2024 23:13:21	Sheet	8 of 9
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Sheet	8 of 9																

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