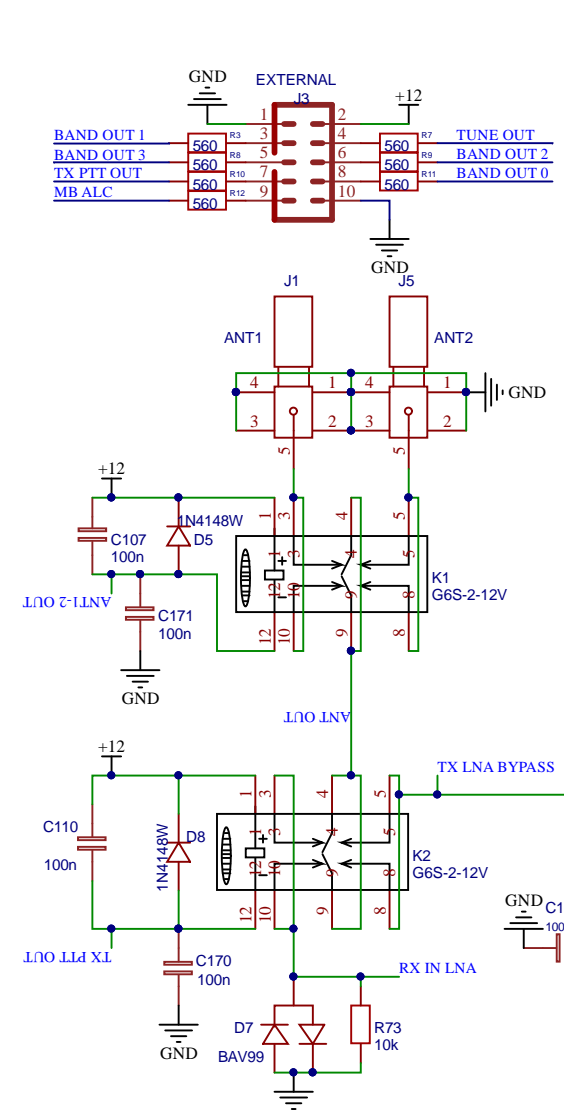
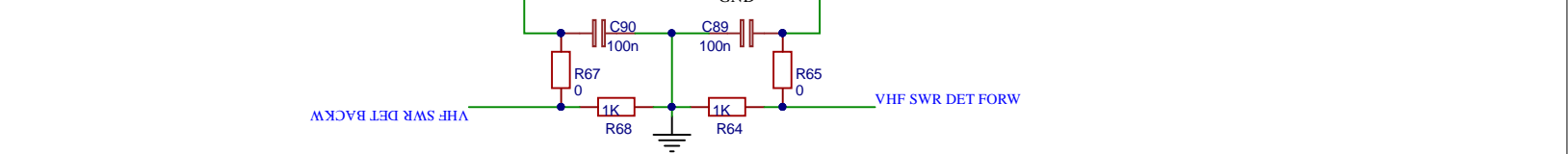
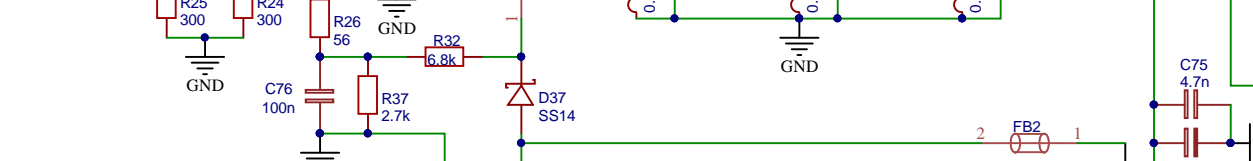
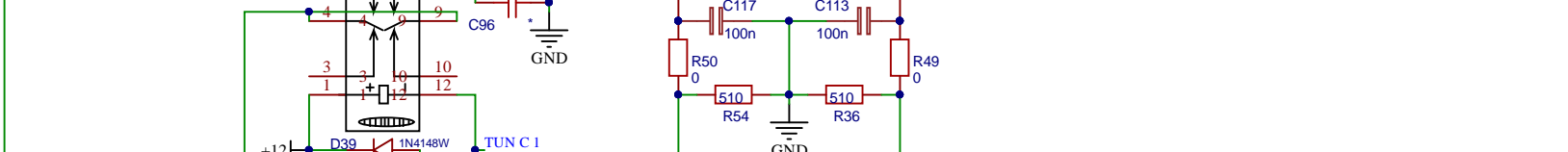


The schematic diagram shows the MBALC module with its 10 pins. Pin 1 is connected to +3V3. Pin 2 is connected to a 2k resistor (R13) in series with a 120 ohm resistor (R14), which is then connected to GND. Pin 3 is connected to CTRL_RCLK. Pin 4 is connected to CTRL_CLK. Pin 5 is connected to CTRL_OE. Pin 6 is connected to CTRL_DATA. Pin 7 is connected to SWR_DET FORW. Pin 8 is connected to GND. Pin 9 is connected to GND. Pin 10 is connected to MB ALC. A diode (D2, SMAJ5.0A-TR) is connected between MB ALC and GND.

[illegible][illegible]

The diagram shows two interconnected blocks: **HF AMP DRIVER** and **HF AMP**.

- HF AMP DRIVER** (left block, green):
 - Input: **HF_AMP_IN** (blue line with a yellow circle).
 - Output: **HF_AMP_DRIVER_OUT_A** (blue line).
 - Input: **HF_AMP_BIAS_ON** (blue line with a yellow circle).
 - Output: **HF_AMP_DRIVER_OUT_B** (blue line).
- HF AMP** (right block, green):
 - Input: **HF_AMP_DRIVER_OUT_A** (blue line).
 - Output: **HF_AMP_OUT** (blue line with a yellow circle).
 - Input: **HF_AMP_DRIVER_OUT_B** (blue line).
 - Output: **HF_AMP_BIAS_ON** (blue line with a yellow circle).

Connections between the blocks:

- HF_AMP_DRIVER_OUT_A** connects to **HF AMP** input.
- HF AMP** output **HF_AMP_OUT** connects back to **HF AMP DRIVER** input **HF_AMP_IN**.
- HF_AMP_DRIVER_OUT_B** connects to **HF AMP** input.
- HF AMP** output **HF_AMP_BIAS_ON** connects back to **HF AMP DRIVER** input **HF_AMP_BIAS_ON**.

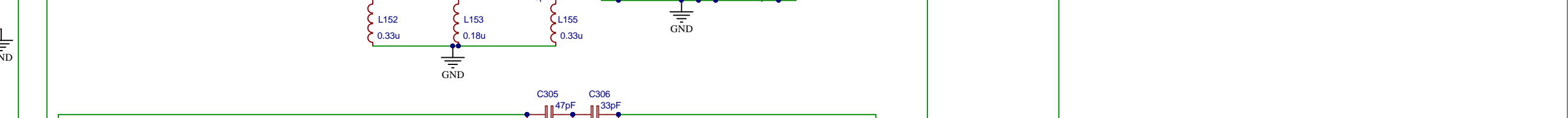
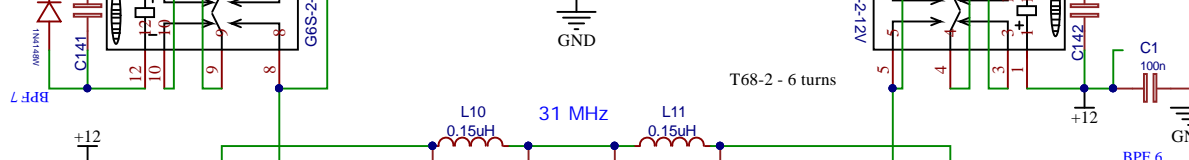
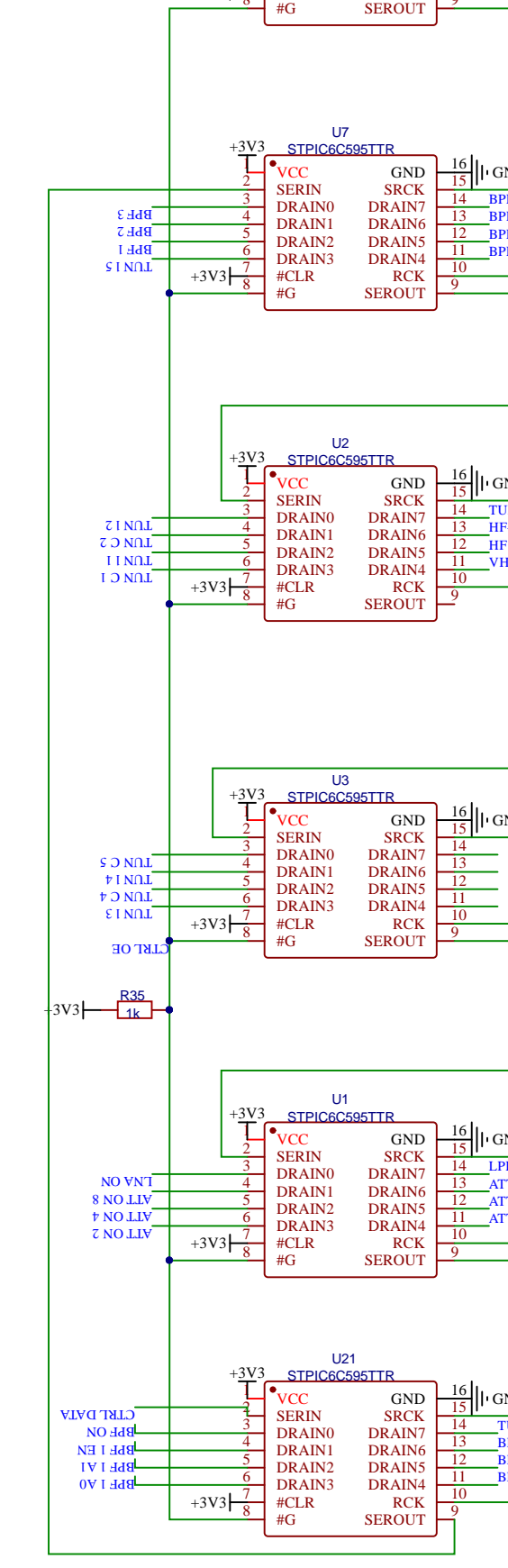


Pinout diagram for the STPIC9C595TTR (U1) showing connections for TX PTT OUT, BAND OUT 0, BAND OUT 2, TUNE OUT, and power pins.

Pin	Label	Pin	Label
1	VCC	16	GND
2	SERIN	15	SRK
3	DRAIN0	14	DRAIN7
4	DRAIN1	13	DRAIN6
5	DRAIN2	12	DRAIN5
6	DRAIN3	11	DRAIN4
7	CLR	10	RCK

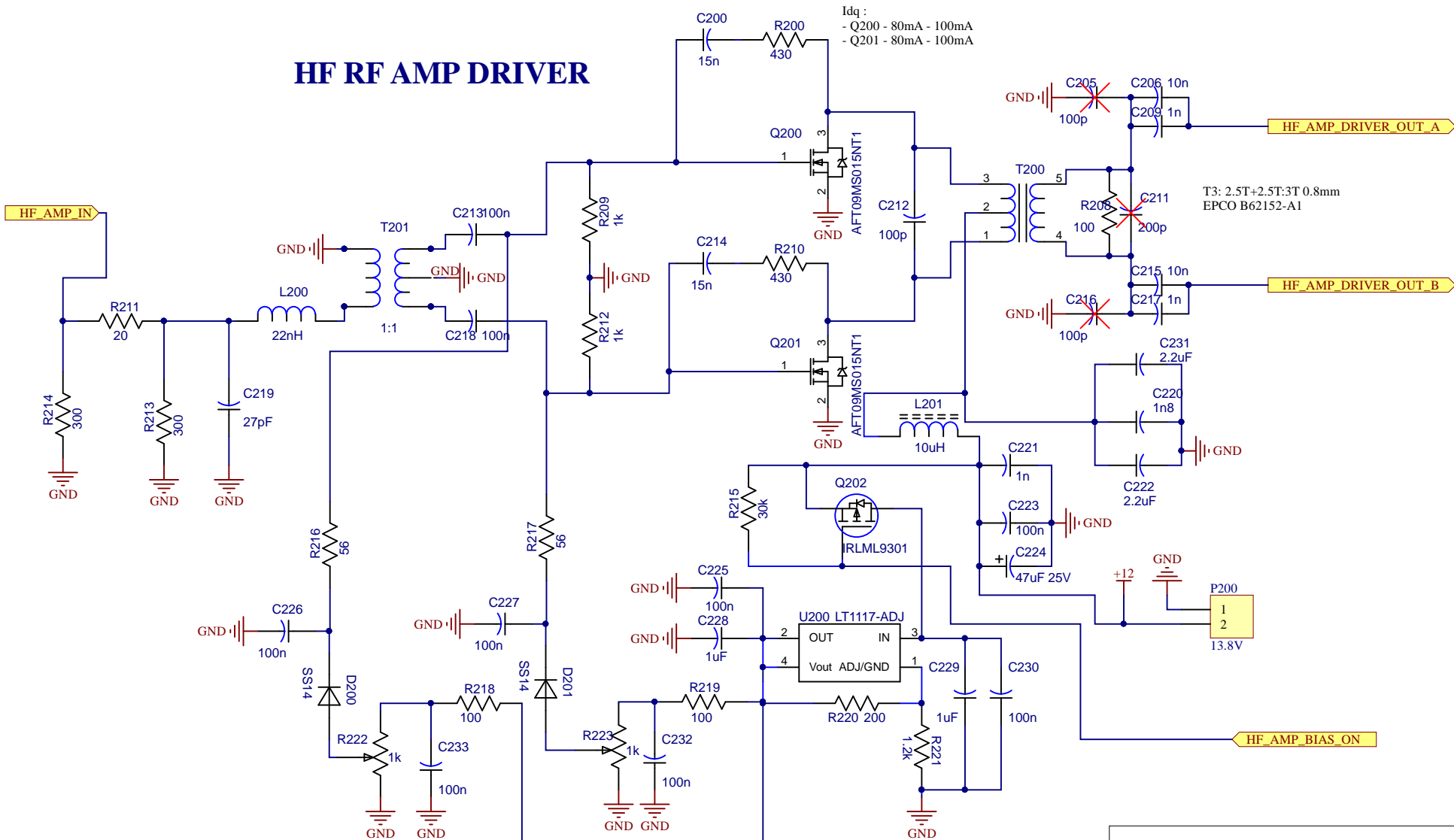
Additional connections shown in the diagram:

- TX PTT OUT is connected to pin 3.
- BAND OUT 0 is connected to pin 4.
- BAND OUT 2 is connected to pin 5.
- TUNE OUT is connected to pin 6.
- +3V3 is connected to pin 1 (VCC) and pin 7 (CLR).
- GND is connected to pin 16.
- SRK is connected to pin 15.
- DRAIN7 is connected to pin 14.
- DRAIN6 is connected to pin 13.
- DRAIN5 is connected to pin 12.
- DRAIN4 is connected to pin 11.
- RCK is connected to pin 10.



RF-BIG-DB5AT_main_v1.schdoc			
	Date	Name	Revision:
Created:	05.11.2021	T. Angelov (DB5AT)	v1
Checked:			Size: A3
Released:			Sheet 1 of 3
File: RF-BIG-DB5AT_main_v1.schdoc			

HF RF AMP DRIVER



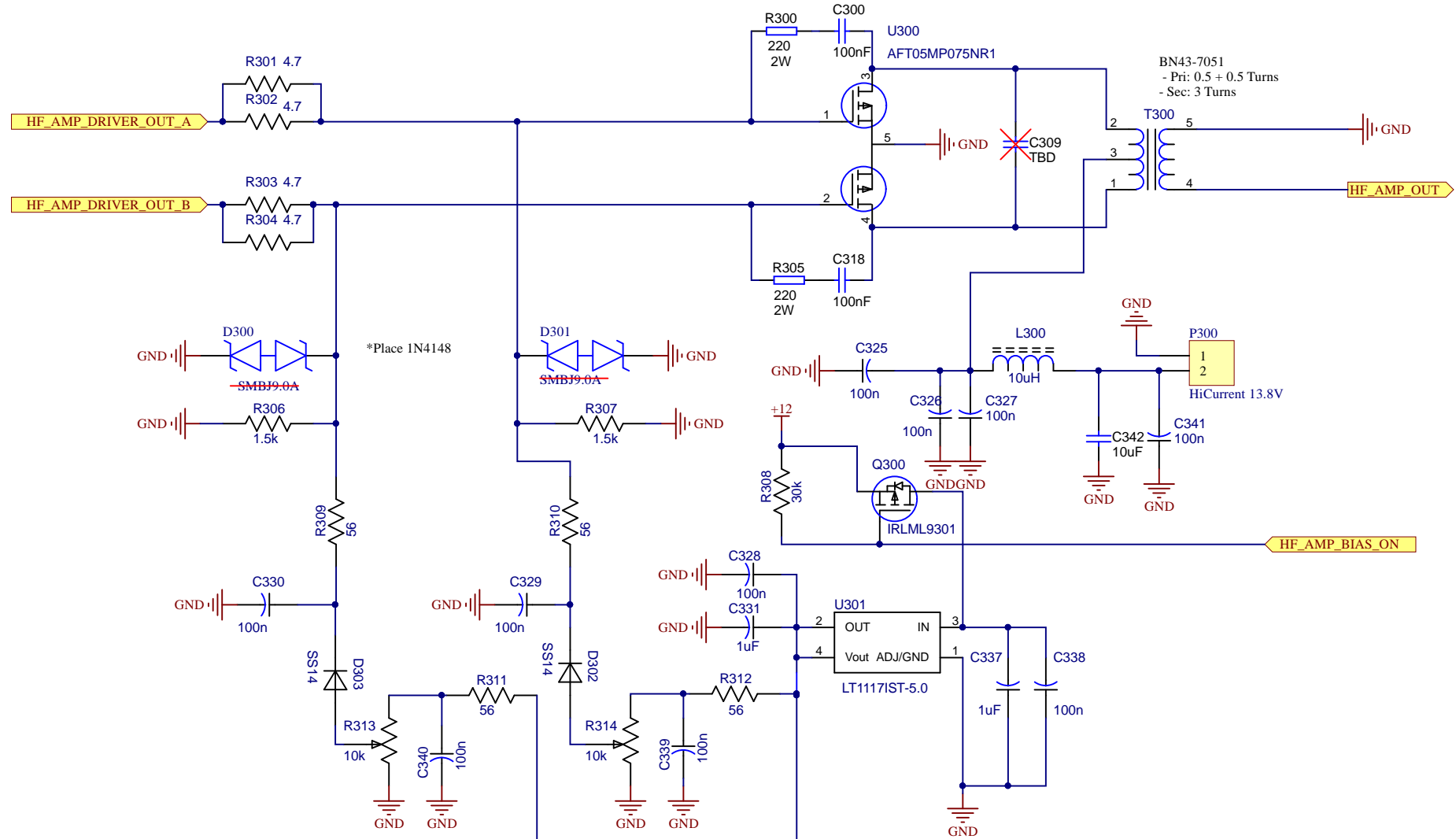
RF-BIG-DB5AT_v1.PrjPCB

HF_AMP_DRIVER.SchDoc

Created:	Date	Name	Revision:
Checked:	05.11.2021	T. Angelov (DB5AT)	v1
Released:			Size: A4
File: HF_AMP_DRIVER.SchDoc			Sheet 2 of 3
HSI No.			

HF RF AMP

Idq U300 :
2x 80mA - 100mA



RF-BIG-DB5AT_v1.PrjPCB

HF_AMP.SchDoc

	Date	Name	Revision:
Created:	05.11.2021	T. Angelov (DB5AT)	v1
Checked:			Size: A4
Released:			Sheet 3 of 3
File: HF_AMP.SchDoc			
HSI_No.			