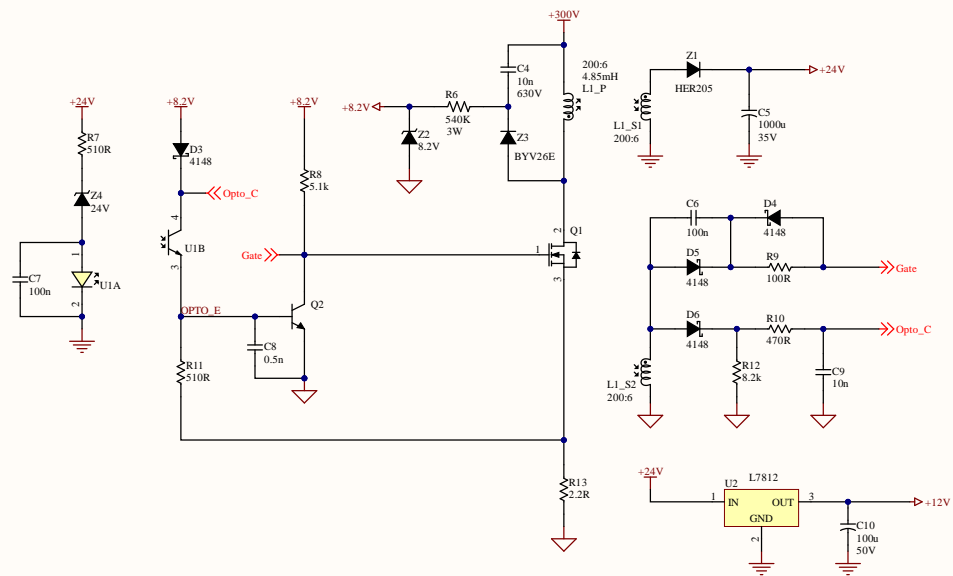


220VAC to 300VDC Converter Circuit



U100

Pin connections shown:

- In-:** Vref, C104 (104), Sync (marked with a red X), Osc Out (marked with a red X), CT, RT (6.3k), Discharge, Shutdown, Soft Start.
- Vref:** Vref, Vref.
- Vin:** Vref.
- Out B:** Out_B, Vref, +12V.
- GND:** GND.
- Out A:** Out_A, Out_A.
- Comp:** Comp.

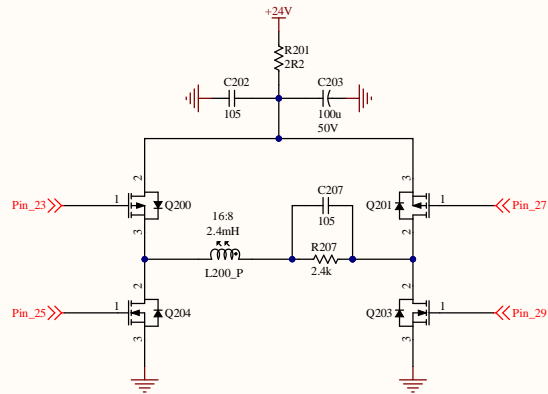
Formula box:

$$f = 1 / CT * (0.7 * RT + 3 * RD)$$

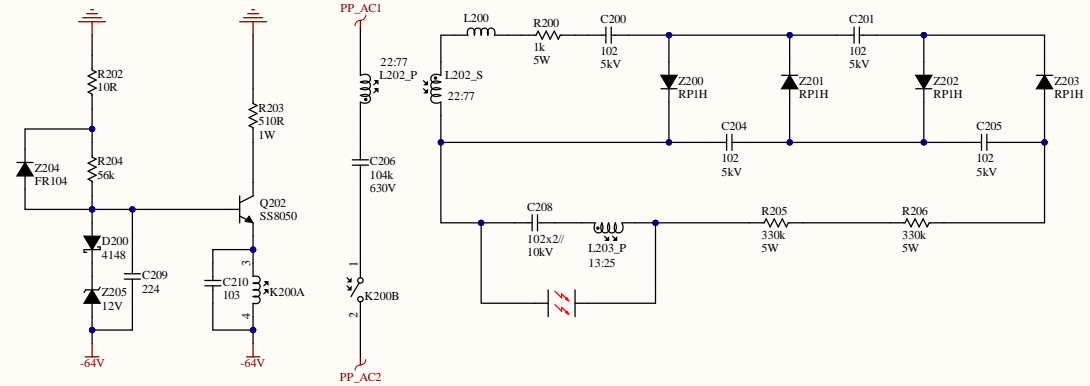
The schematic diagram shows a two-stage MOSFET amplifier. The first stage uses Q109 (SS8050) as a common-emitter amplifier driven by a base current source consisting of Z104 (8.2V), R117 (10k), and R118 (1k). Its collector is connected to the emitter of Q110 (SS8050) through R125 (1k). The emitter of Q110 is connected to ground via R129 (100R) and C113 (104). The collector of Q110 is connected to the load through R126 (5.6k). The voltage across R126 is sensed at Pin_6. This signal is also fed back to the base of Q109 through R124 (5k). The sense voltage is also connected to the non-inverting input (+) of op-amp U101 (LM324) through R127 (5.1k). The op-amp's inverting input (-) is connected to ground through R130 (100R) and R132 (1k), and to the output through R131 (2.2k). The op-amp is powered by +12V and Vmf. Its output is connected to the load through R128 (10k). The feedback network consists of C110 (501), C111 (2A102), R120 (20k), D104 (K&S), and D105 (K&S). The final output is taken from the load through R119 (1k) and labeled Comp.

[3] Full Bridge Push Pull Circuit

Isolated Mosfet Driver Circuit



High Voltage Generator Circuit



Full-Bridge Push-Pull Converter Circuit

