2 MANUFACTURING A PHYSICAL PRINTED CIRCUIT BOARD FOR TRANSMITTER

2.1 PCB schematics

We designed PCB in two layers by using both SMD and through hold components. First of all, we drew the schematics for the transmitter circuit.

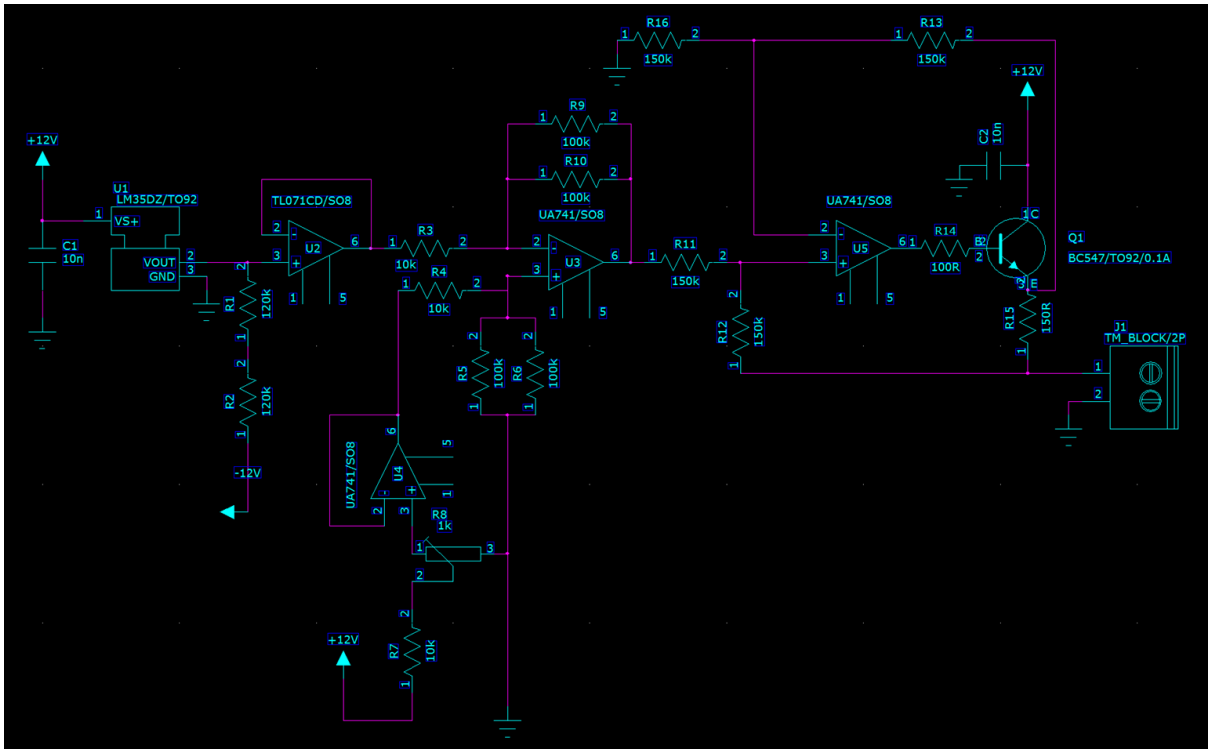

Figure 1. Transmitter schematic

Next, we also designed the suitable power supply circuit for transmitter by excluding the transformers and using the appropriate capacitors being available in VAMK's libraries.

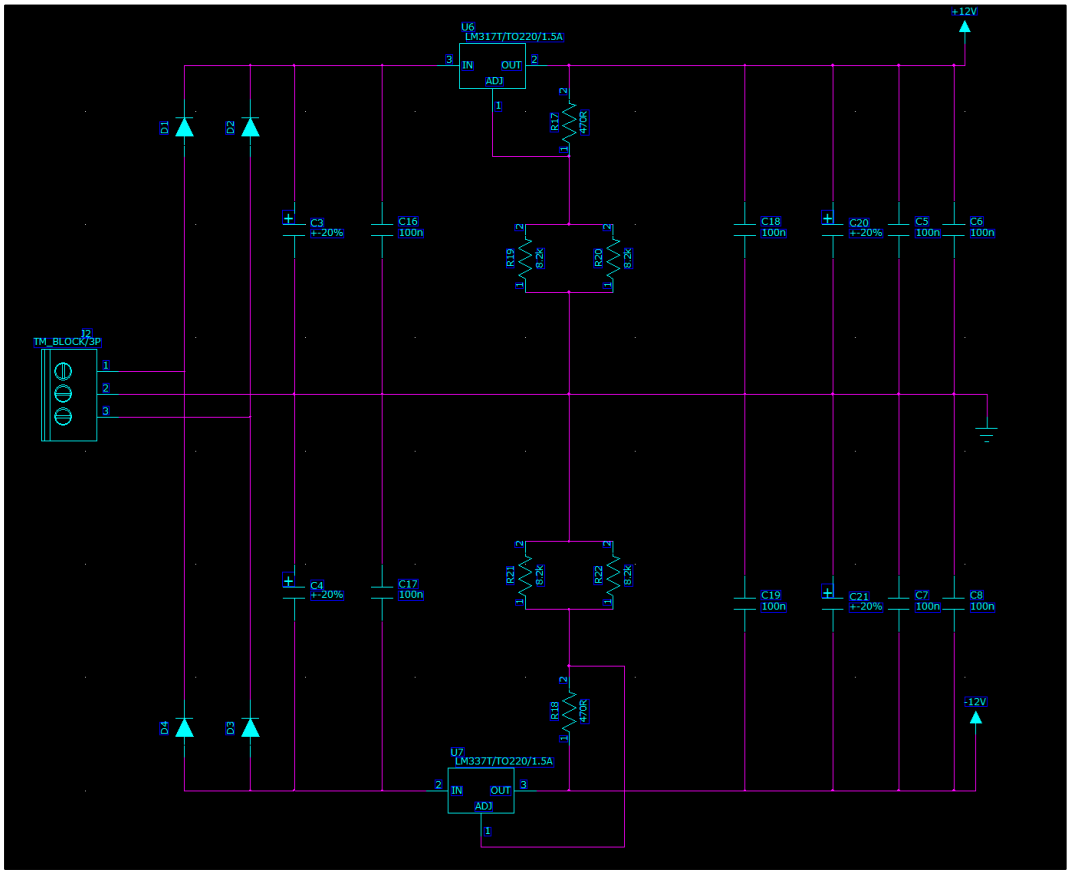

Figure 2. Transmitter's Power supply schematic

2.2 PCB layout

After designing the schematics, the transmitter's PCB layout was designed as below:

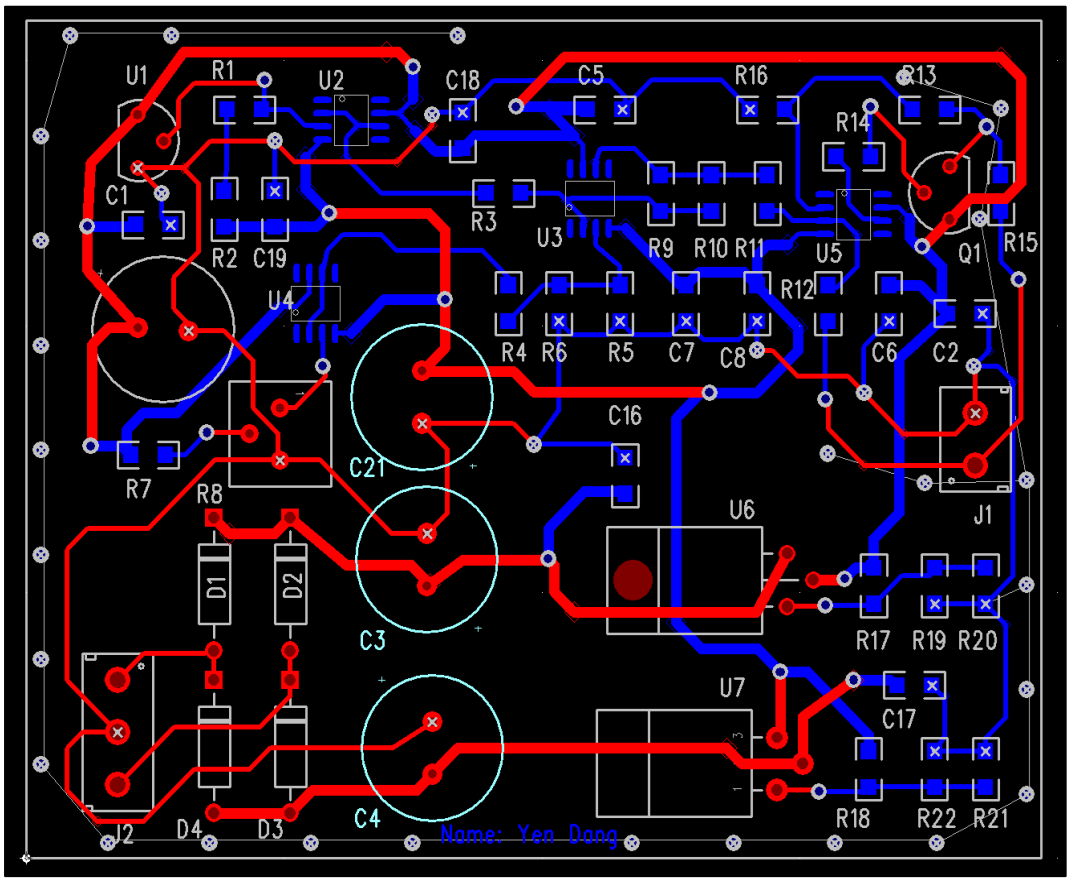

Figure 3. Transmitter's PCB layout

Before manufacturing a physical PCB, we had to check the Clearance and Connectivity errors. The results showed “NO ERRORS FOUND” as Figure 4.

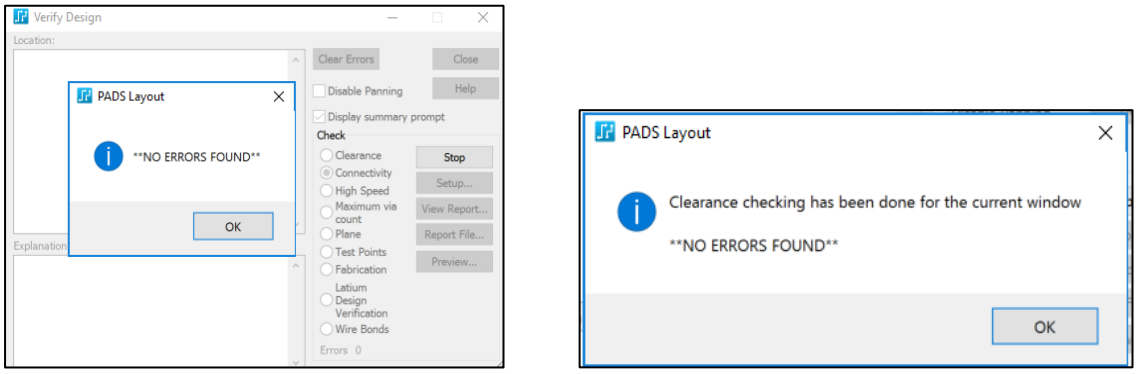

Figure 4. Transmitter’s PCB layout

2.3 Manufacturing the physical PCB

The physical PCB for transmitter was generated as Figure 5.

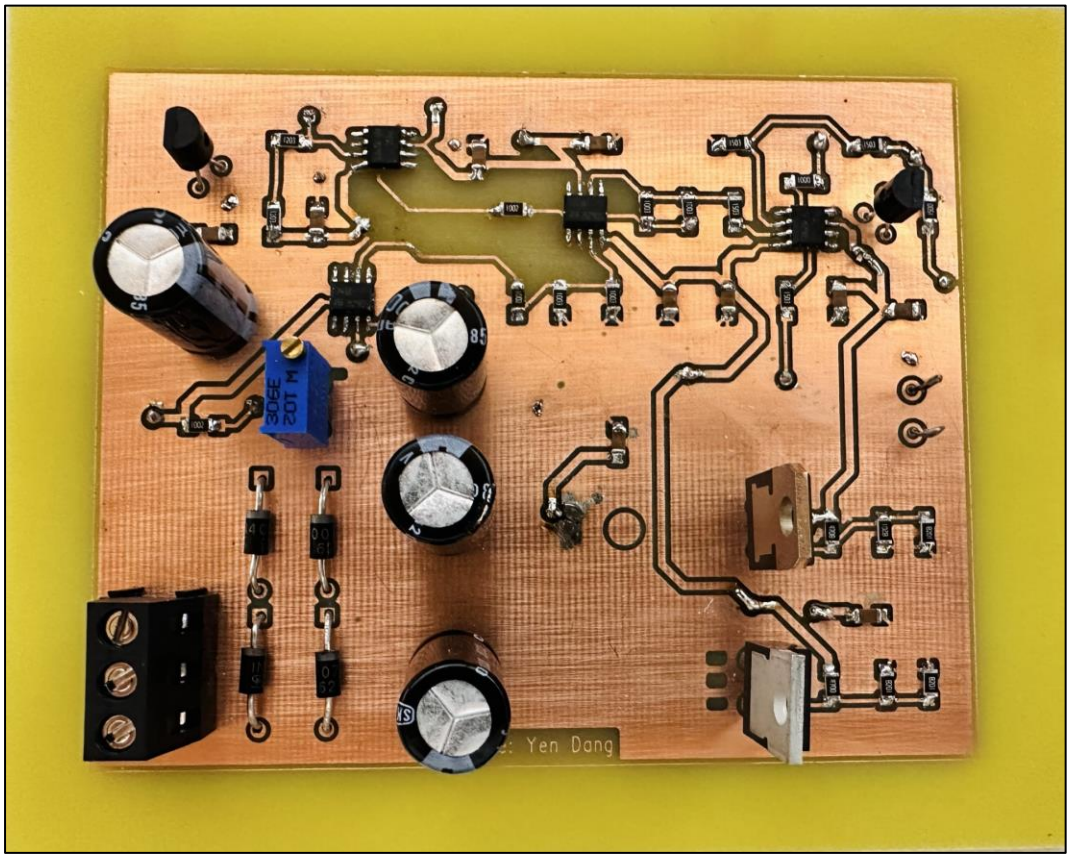

Figure 5. The physical PCB for transmitter.