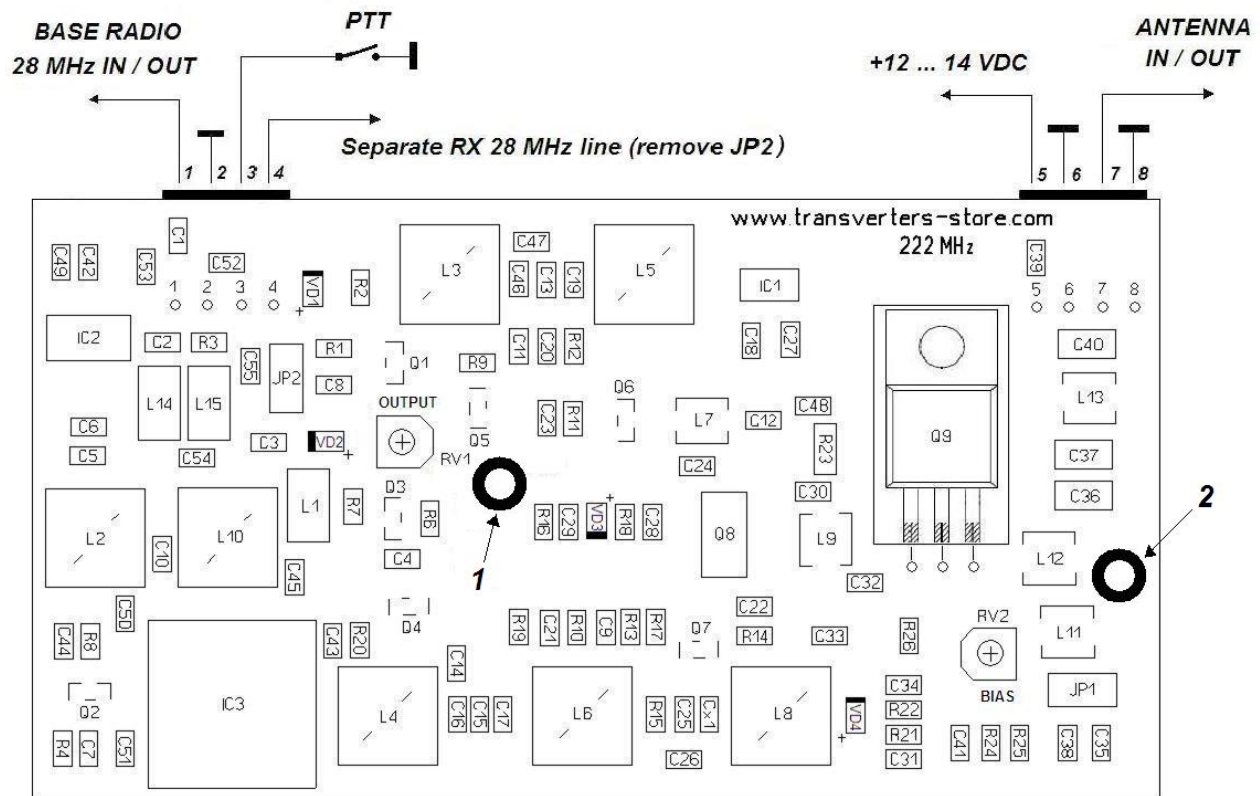


222/28 MHz TRANSVERTER BOARD

With this Transverter board you can work on **1.25 meter** band using any type of the HF radio that has **10 meter** band. It would work the whole 1.25 meter band at **222 to 226 MHz** if your base radio has the **28 to 32 MHz** band. **It works any modes such SSB, CW or FM if its available in your radio.**

Technical specifications

- RF range - 222 ... 226 MHz
- IF range - 28 ... 32 MHz
- IF input power - 1 ... 50 mW (0.05 W max.) or 0 ... 17 dBm
- LO frequency - 194 MHz
- Output power - 8 ... 10 W
- RX gain - **typ. 20 dB**
- Noise figure - **typ. 1.0 dB**
- Image rejection - **typ. 70 dB**
- PTT control - **Contact closure to ground**
- Supply voltage - **+13.8 V DC (+12 ... 14 V DC)**
- Current consumption - **typ. 1.3 A (TX)**



Pinout of the connectors:

1. IF 28 MHz transverter input – output line
2. Ground
3. PTT line (**ground it to switch Transverter to the TX mode**)
4. **Separate RX 28 MHz line (remove JP2)**
5. +12 V
6. Ground
7. Antenna 222 MHz
8. Ground

To read the tips below and mount your transverter EXACTLY as described.

1. **RF input** power to the transverter from your HF radio should be **NO MORE** than **50 mW (0.05 watts max)**. You can adjust it using **RV1** pot on the board.
2. **Initially Transverter set on the common IF 28 MHz RX/TX line on the pin 1.**
3. **Removing JP2 jumper allows you to use the RX/TX lines separately (TX pin 1, RX pin 4).**
4. DC supply is **+12 ... 14 V**
5. To get the transverter switched to the **TX** mode close the **PTT** line to the **ground**.
6. **RV1** pot adjusts **OUTPUT POWER** of the Transverter.
7. **RV2** pot adjusts **BIAS** of the output transistor.

The transverter board suppose to be mounted onto heat sink.

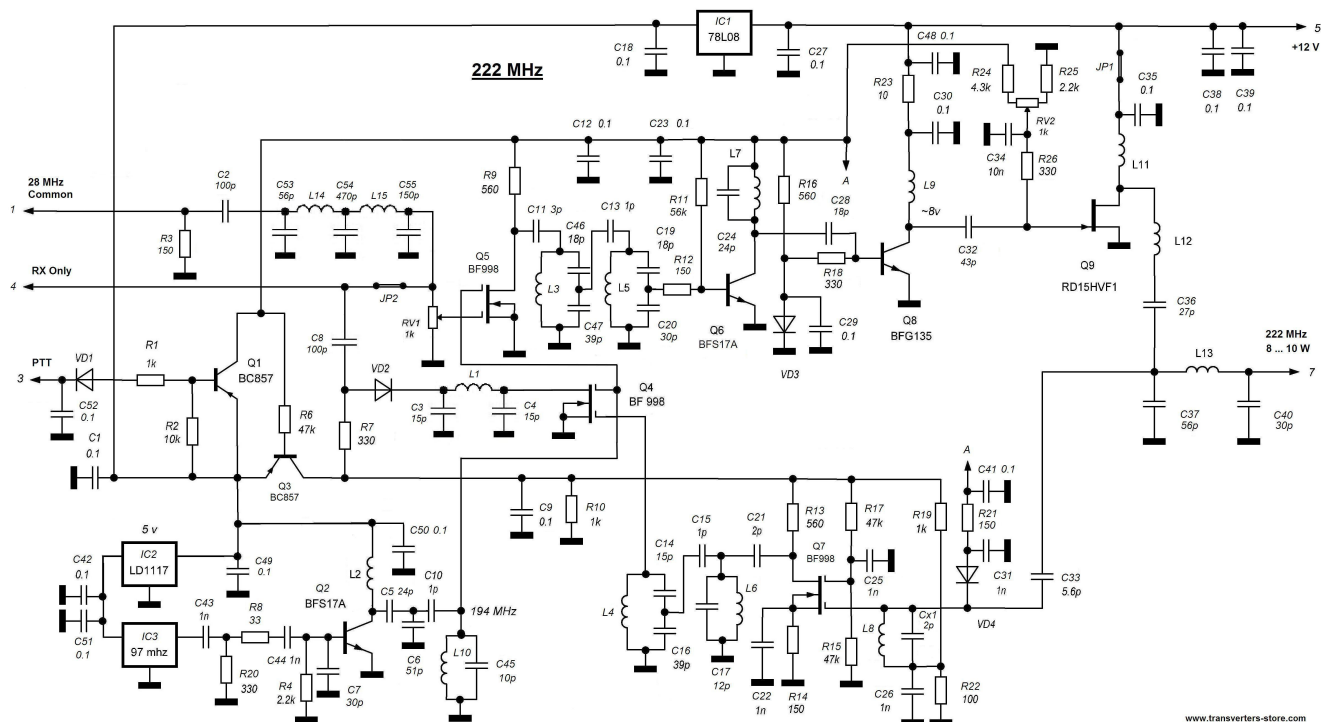
Using **TWO metal bolts** screw down the transverter board onto heat sink **TROUGH** the hole 1 and **output transistor hole**. Put a few nuts or washers under mounting hole 1 between the transverter board and the heat sink so to get the board flat mounted above the heat sink about a few millimetres. Or you can just use a piece of plastic between the board and heatsink under mounting hole drilling the hole in and get the bolt through. **Do not use hole 2 ! I discovered that in some enclosures it might cause oscillating the transverter! The stable work of the transverter depends of this!**

The output transistor should be mounted onto heat sink without insulation.

All RF RX and TX lines should be done with the coax cable!

BE CAREFUL !

Applying more than 0.1 W from your radio to the transverter board you instantly get the transverter board killed.



Web Store: <http://transverters-store.com/>
E-mail: ut5jcw@usa.com
Skype: [ut5jcw](#)