

Trig TT22 Transponder – Modifications to the transmitter board.

12th February 2018

The modifications to the TT22 transmitter board were necessitated by the impending exhaustion of life-bought stocks of the device used in the first stage of the transmitter strip. The final device was still available.

The modified TT22 transmitter board was developed alongside that for the lower-powered TT21 transponder which was necessitated by the same obsolescence issue, plus two other parts. The same transistor line-up as in the TT21, but without the reduced supply voltage, meets all the requirements of the TT22 transmitter.

The modified design follows that of the original, but with modern alternatives to the original parts. The first stage simply uses a close equivalent of the original part.

The second stage and final stage are now amalgamated in a single package, but operate as before as cascaded stages with separate matching and bias arrangements. The new final device is intended for class-1 transponders such as the TT22.

The TT22 transmitter retains its original output filtering structure and its modulator design.

The modified TT22 transponder meets all the same specifications as the original. It remains electrically and functionally identical to the original and is used in the same application.

Andrew Davis

CEO

Trig Avionics Ltd