**K9HZ 100W LPF 160M-6M**

**BUILD INSTRUCTIONS for PCB V1.00**

**February 15, 2024**

**Operating Data:**

Power Requirements: 12-15 VDC at 100ma max.

Frequency Range: 1.8MHz – 54Mhz/ 160M – 6M in 11 bands.

Input: 20W or 100W.

**Inventory and Prework**

Before you begin, inventory your parts against the latest BOM to make sure you have everything you need to complete the PA build. The complete BOM is given in Table 1.

Decide if the LP filters, bPF, path, antenna select etc. will be selected by addresses I2C or by band connector and LPF ACC control Connector. If I2C leave out R8, R9, R10, and R11. If no I2C, leave U15, R14, and R12 off the board and control via band connector and LPF ACC Control. This can be split up.

FOR and REF Power.

1. Detected by diodes:
   1. Leave C139, C147, C144, C137, C152, C154, C155, C150 L36, L41, R16, R17, R18, R22, R24, R25, U14, U19 off the board.
2. Detected by AD8307’s:
   1. Leave C149, C156, D1, D2, R19, R20, R26, R27, R28, R29 off the board.
3. FOR and REF Sent via I2C using the A/D:
   1. Leave R23 and R30 off the board.
4. FOR and REF analog signals sent via BANDS connector:
   1. Leave C145, C146, C151, U17, and U20 off the board.

1.8Mhz HPF.

1. Build.

2. Bypass (for MF reception). Leave C14, C15, C16, L1, and L2 off the board. Put 0 Ohm resistors in positions for C14, C16, and C16.