

# ANALOG DIAL/VFO FOR FT-7

# V1.0 SCH

pcb @ V1 july 2019

**Function button (IO VN)**

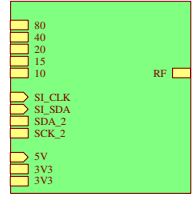
Is a momentary pushbutton, switching to ground.

The functions are:-

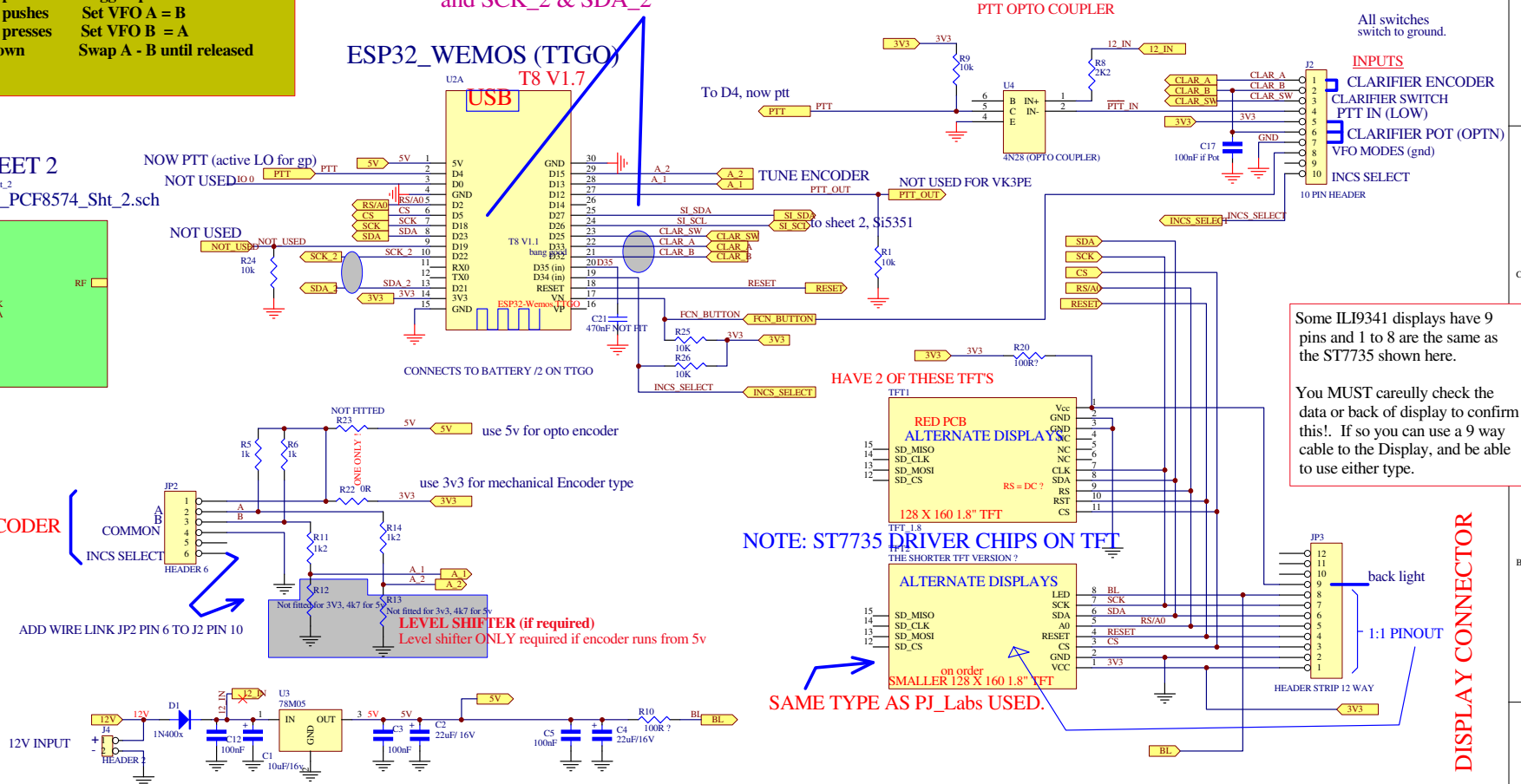
- One short press      Swap VFO A/B
- 2 short presses      Toggle split mode ON/OFF
- 3 short pushes      Set VFO A = B
- 4 short presses      Set VFO B = A
- Held down              Swap A - B until released

V1 pcb is missing 10k to 3V3 from CLAR\_SW and also CLAR\_A and CLAR\_B lines and SCK\_2 & SDA\_2

**SHEET 2**  
PCF8574\_Sht\_2  
TTGO\_PCF8574\_Sht\_2.sch



ENCODER



Some ILI9341 displays have 9 pins and 1 to 8 are the same as the ST7735 shown here.

You MUST carefully check the data or back of display to confirm this!. If so you can use a 9 way cable to the Display, and be able to use either type.

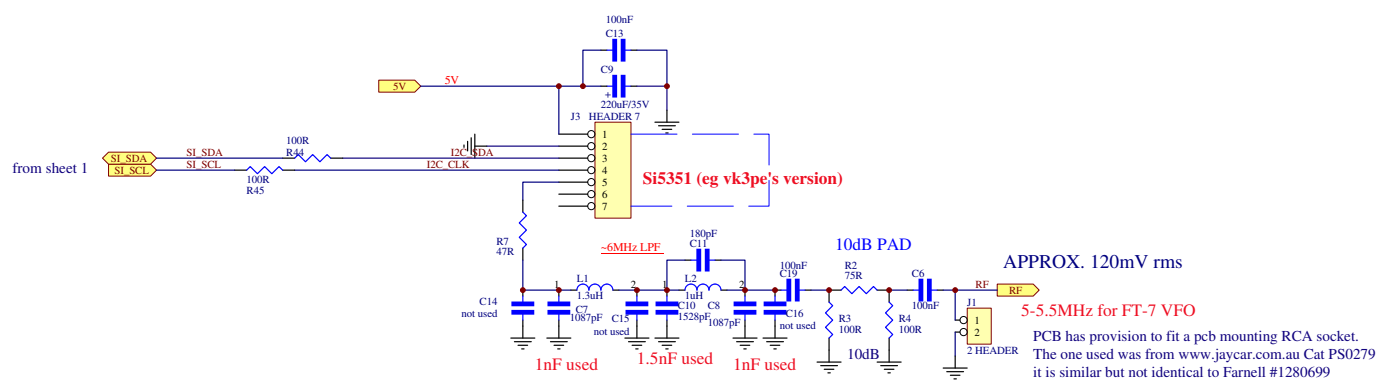
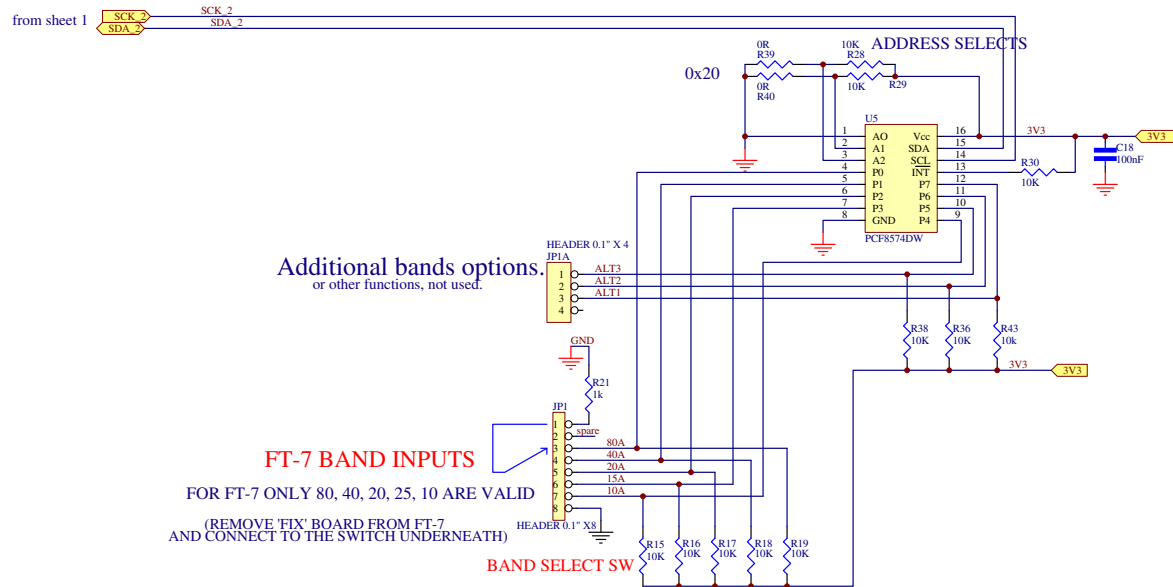
Original Software by TJ\_Labs, heavily modified by WA2FZW

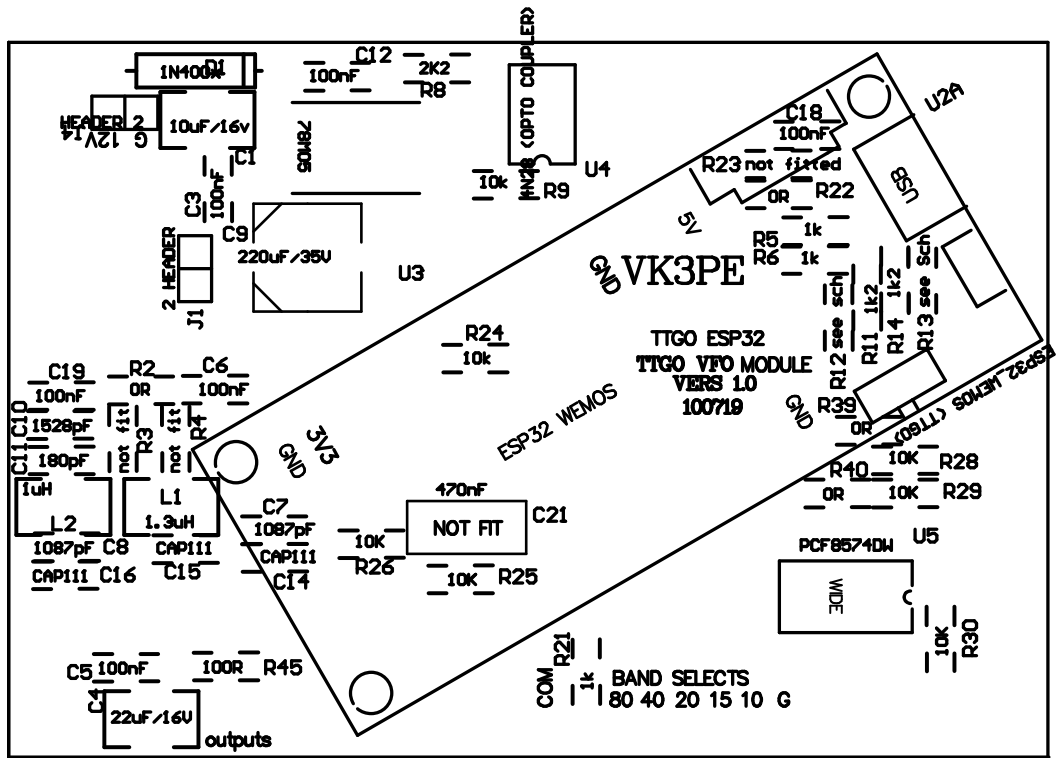
REF: <https://tj-lab.org/2019/02/17/vfo5/>

July 2019 V1 pcb  
 100519 CORRECT NETS ON ttgo 21 & 22 WAS 2A  
 120519 V3 with alt ESP32  
 090519 added R5 & R6 for opto encoder  
 280419 see text next to ESP32  
 280319

Title: ESP32 VFO/Display		DRAWN BY: VK3PE	
Size: A3	Date: 21-Aug-2019	Sheet: 1	of: 2
Time: 14:24:47		(C) 2007-2019	

# BAND INPUT OPTIONS, and Si5351 CONNECTIONS





# VK3PE JULY 2019

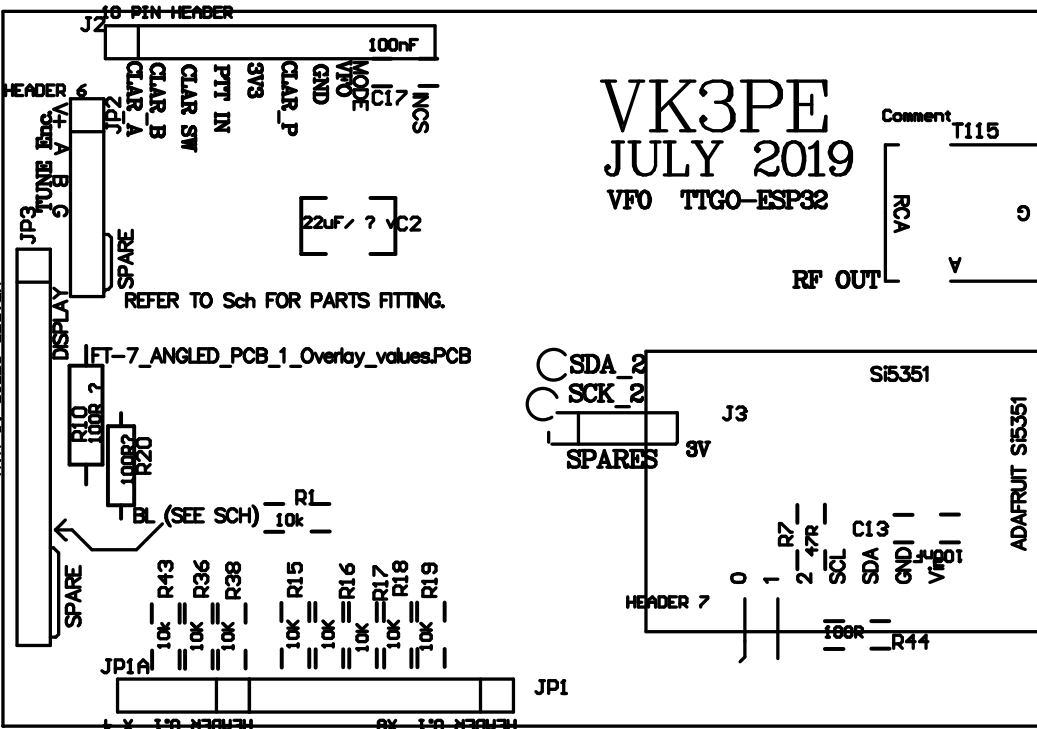
VFO TTGO-ESP32

Comment T115

RCA  
V

RF OUT

REFER TO Sch FOR PARTS FITTING.



HEADER STRIP 12 WAY

HEADER 0-1 X 1

HEADER 0-1 X 8