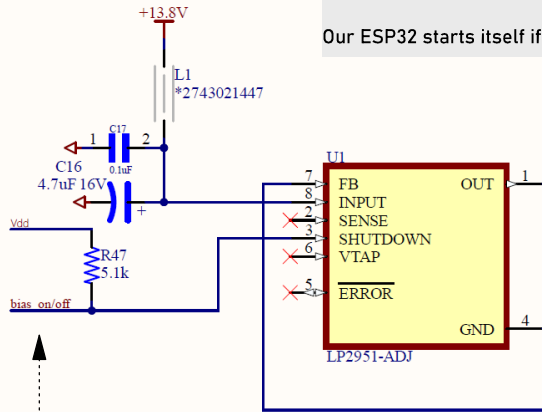


Remark:  
 We don't touch the build-in SoC STM32G030.  
 The STM stay offline/inactive if +12V connected to the amp. First if you press 2sec the ON button it will start.  
 After my revise: WE DON'T TOUCH THIS "ON" BUTTON ANYMORE !

Our ESP32 starts itself if +12V power supply connected to the amp and S1 is closed.



**PA switch logics**

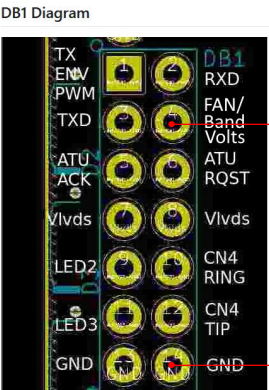
Signal Transmit Receive

bias on/off	L	H
BP/BFR	H	L
PTT_RCA	L	H

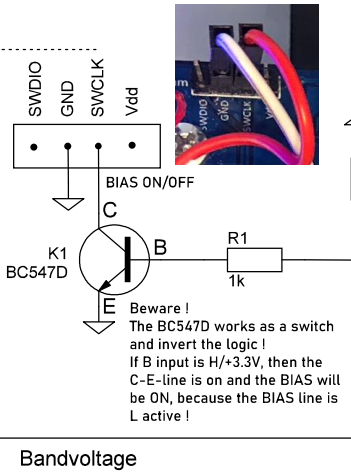
Vdd = +3.3V  
 H = HIGH = +3.3V  
 L = LOW = 0V/GND

C2 (100nF) please install near GPIO Pin ESP32 for RF protection of ADC input

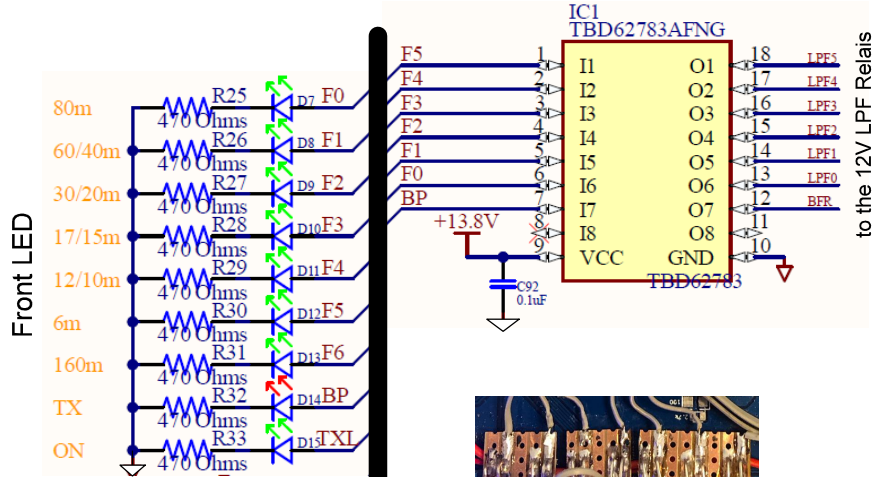
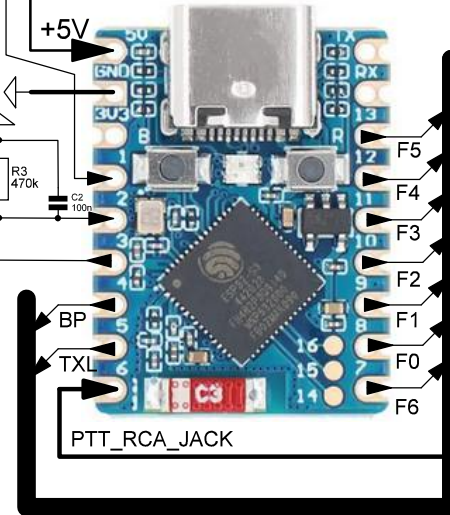
WAVESHARE ESP32-S3 Zero



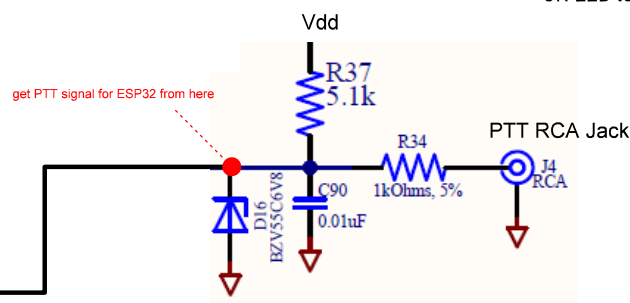
HL2 - DB1 Connector (internal)



Bandvoltage



cut off the LED and split the LED lines like in picture, then connect all with wire to the GPIO-Pins of ESP32 (TX and ON LED too)



get PTT signal for ESP32 from here

The access to the PTT circuit is at the bottom layer of the PA board !

**Replacing amp control Neptune PA 100W with an ESP32 SoC (WAVESHARE ESP32-S3 Zero) especially for stable use with Hermes-Lite 2 idea by DL1BZ & made by DL1BZ in 04/2024**

**ONLY for use in Amateur Radio !  
 NOT for commercial use in any case !  
 WITHOUT ANY WARRANTY !  
 YOU DO ALL AT YOUR OWN RISK !**