

# Display board assembly instructions

2024/04/04 PE1MUD/PE1OBW

## Components:

- 1x PCB
- 1x Display
- 1x ESP32 microcontroller board (programmed and tested)
- 2x 15-pole connector
- 1x 4-pole pin header
- 1x 2-pole pin header
- 1x 4-pole i2c cable connector (part of the cable set)

## Important: Mount the components in the correct order!

- Mount the ESP32 connectors (at the bottom). Tip: insert the ESP32 in the socket while soldering.
- Mount the 2-pole header JP1 (at the bottom)
- Mount the 4-pole header for the display (**on top**)

See Figure 2. Then mount the display and the remaining components.

- Mount the i2c cable connector. Carefully check the orientation, see Figure 1.
- Mount the rotary encoder.
- Mount the display.

When done, place the ESP32 in the socket. Check the orientation! See Figure 3 and Figure 4.

Connect the display board with the baseband board using the 4-pole i2c cable. Make sure that GND and +5V are not swapped!

JP1 is optional. When a jumper is placed on the header, the ESP32 is write-protected.



Figure 1 - I2c connector, detail

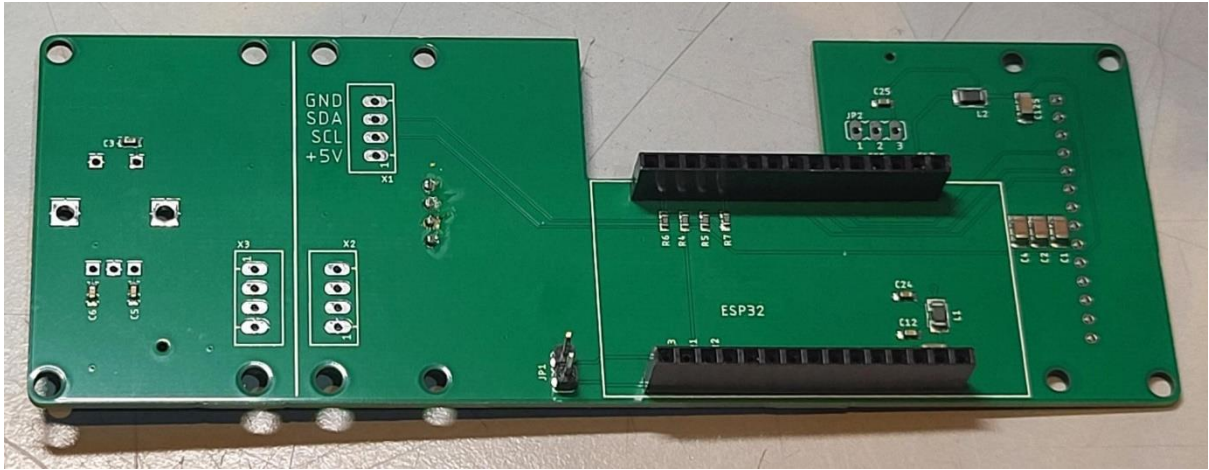


Figure 2 - First mount the ESP connectors and pin headers

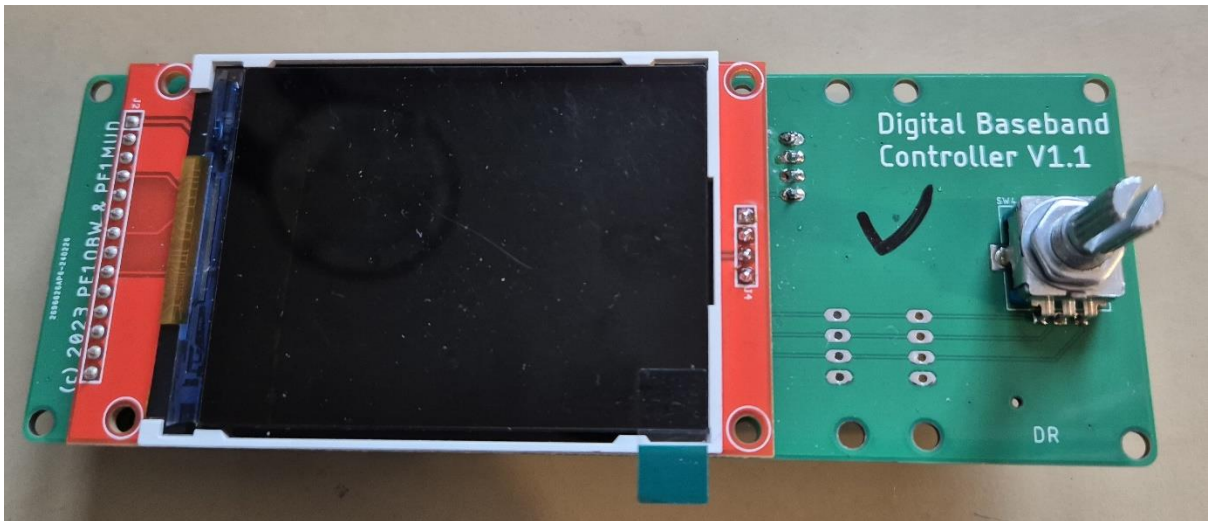


Figure 3 - Finished board, top side

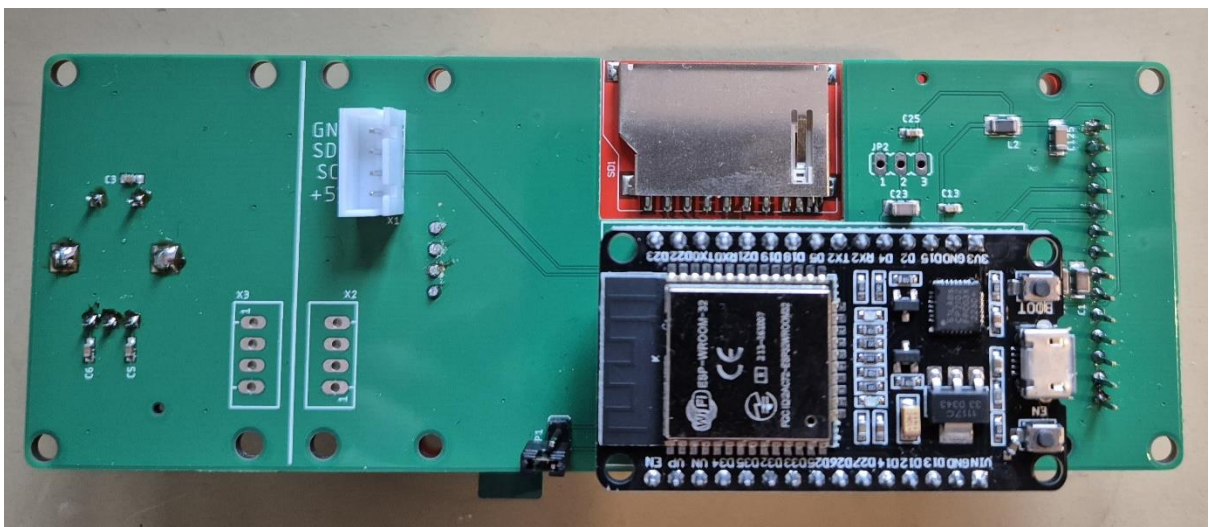


Figure 4 - Finished board, bottom side