Wire patch field

Vin Probe
Iin Probe
Iout Probe

J6
1 J6.1 1
2 J6.2 2
3 J6.3 3

feedback

J61 patch

ESP32-TFT   J4
+3V3 12
ADC0 11
ADC1 10
ADC2 9
ADC3 8
GPIO32 7
GPIO33 6
GPIO25 5
GPIO26 4
GPIO27 3
GND 2
+5V 1

Iout Sense
Vout Sense
Vin Sense
Iout Set
Vout Set
! Enable
CV/CC
Fan PWM

J1
1 J1.1 1
2 J1.2 2
3 J1.3 3
4 J1.4 4
5 J1.5 5
6 J1.6 6
7 J1.7 7
8 J1.8 8

J3 Patch / Test points

To PSU host board

J21 patch
1 2
3 4
5 6
7 8

J22 patch
2
1

R14 1k/zero
R17 1k/zero
R13 1k/zero

PWR_FLAG   VCC
+5V

ADC0 ADC1 ADC2 ADC3
C1   C2   C3   C4   C7   C8
0.1µ 0.1µ 0.1µ 0.1µ   0.1µ

GND/D
JP1 1 2 3

J2
GNDA 1
      2
GNDD 3
      4
VCC   5
      6
TX   7
RX   8

To PSU host board

470µ
GND
PWR_FLAG

TP1
TestPoint_GND

J10
+3V3 1
GND   2
SCL   3
SDA   4
ADDR 5
ALRT 6
A0   7
A1   8
A2   9
A3   10
ADS1115

R18 1k/zero FanPWM
R16 1k/zero NotEnable

R11
68k/zero
R12
68k/zero

R20 100k/none
R15 2k2/none
GND GND

ESP32-TFT   J5
GND   12
GND   11
SDA   10
SCL   9
GPIO17 8
GPIO2   7
GPIO15 6
GPIO13 5
GPIO12 4
GND   3
GND   2
+3V3   1

C5   C6   C9
0.1µ 0.1µ 0.1µ

I2C
GND   4
+3V3 3
SDA   2
SCL   1
J7

FID1 Fiducial
FID2 Fiducial
FID3 Fiducial

Expansion1
GND   1
+3V3   2
SDA   3
SCL   4
GPIO17 5
GPIO13 6
GPIO2   7
GPIO12 8
GPIO25 9
GPIO26 10
GPIO27 11
GPIO33 12
+3V3   13
+5V   14
        15
        16
        17
        18
        19
        20
GND   21
J30

VCC = +5Vdc
Signal labels based on B3603/BST900.

#U1
PCF8574
P0 4
P1 5
P2 6
P3 7
P4 9
P5 10
P6 11
P7 12
VDD 16
VSS 8
SCL 14
SDA 15
A0   1
A1   2
A2   3
INT 13

#ROT1
Rotary_Encoder
B A
S2 S1

Sheet: /
File: JuntekOnSteroidsTTGO.sch
Title: Drok/Juntek-on-steroids
Size: A4   Date: 2021-08-24
KiCad E.D.A. kicad (5.1.10)-1
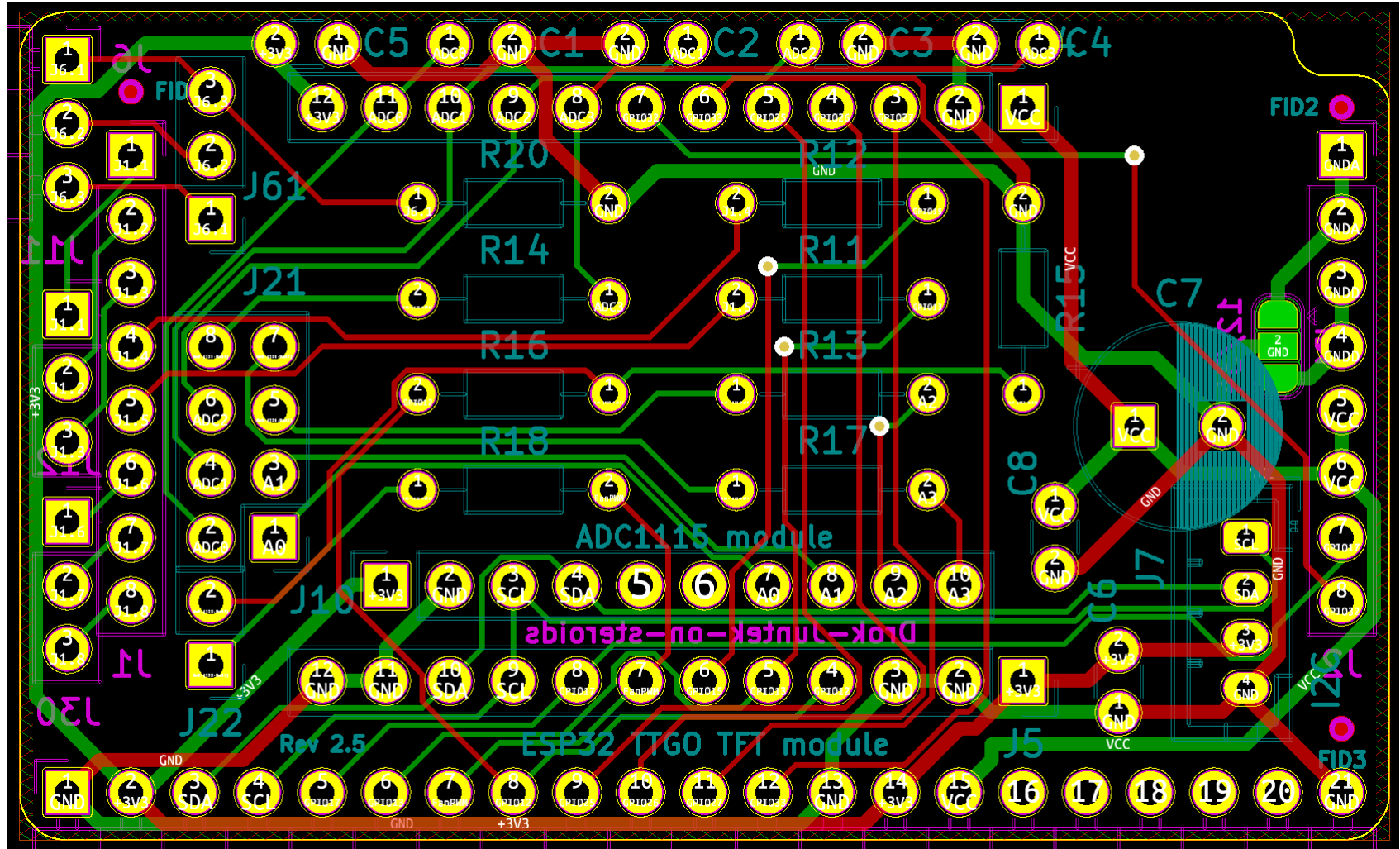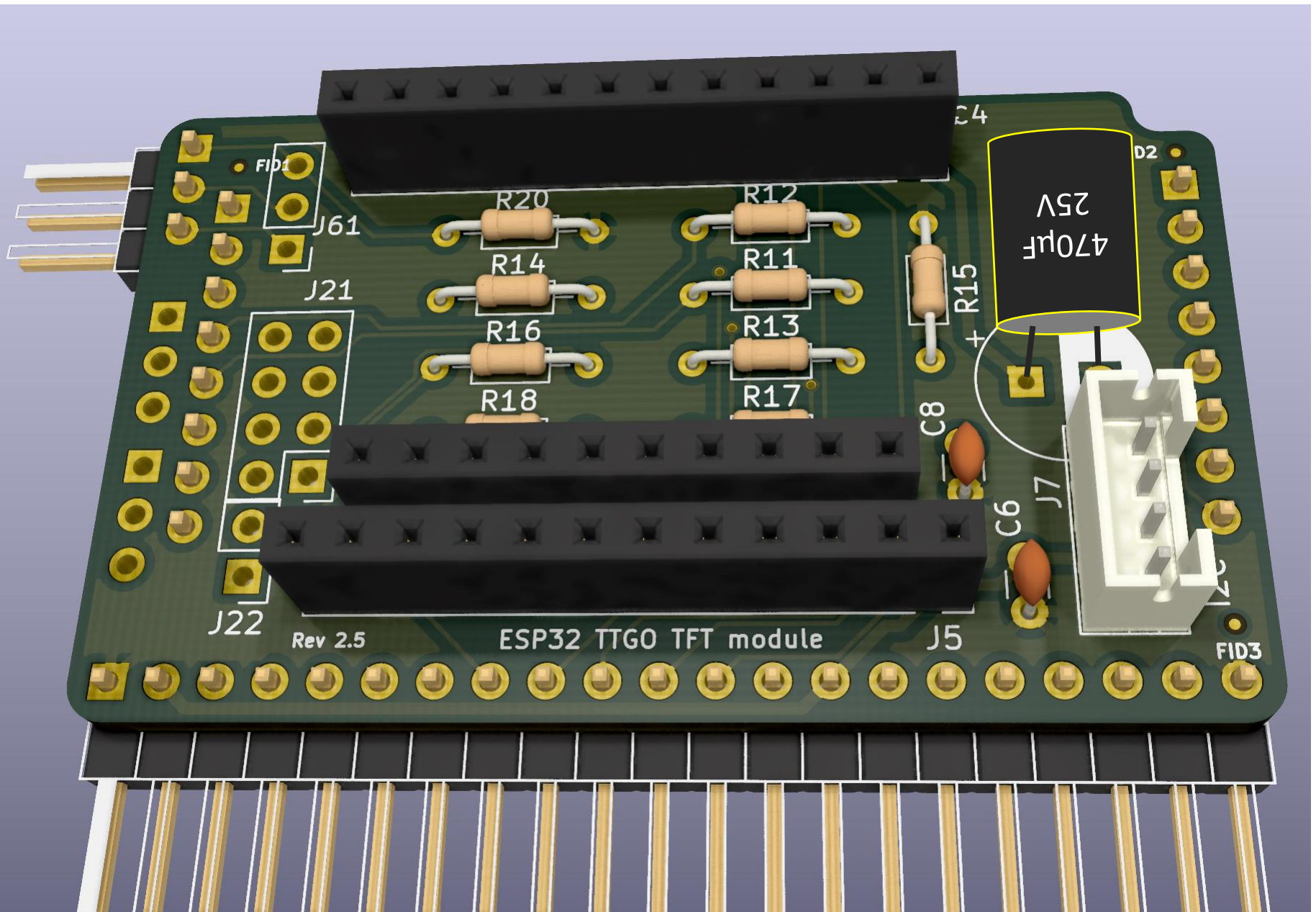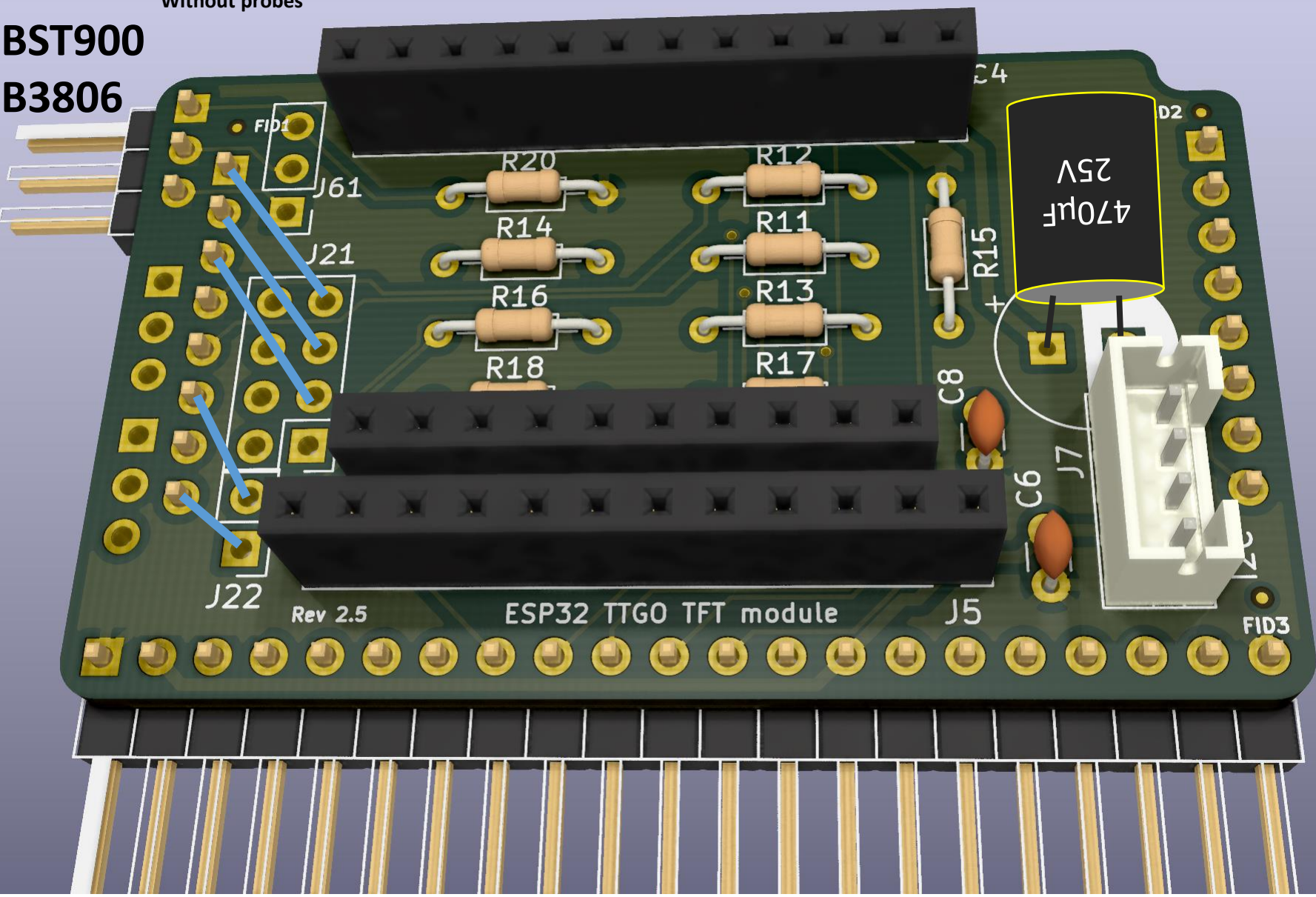Rev: 3.1
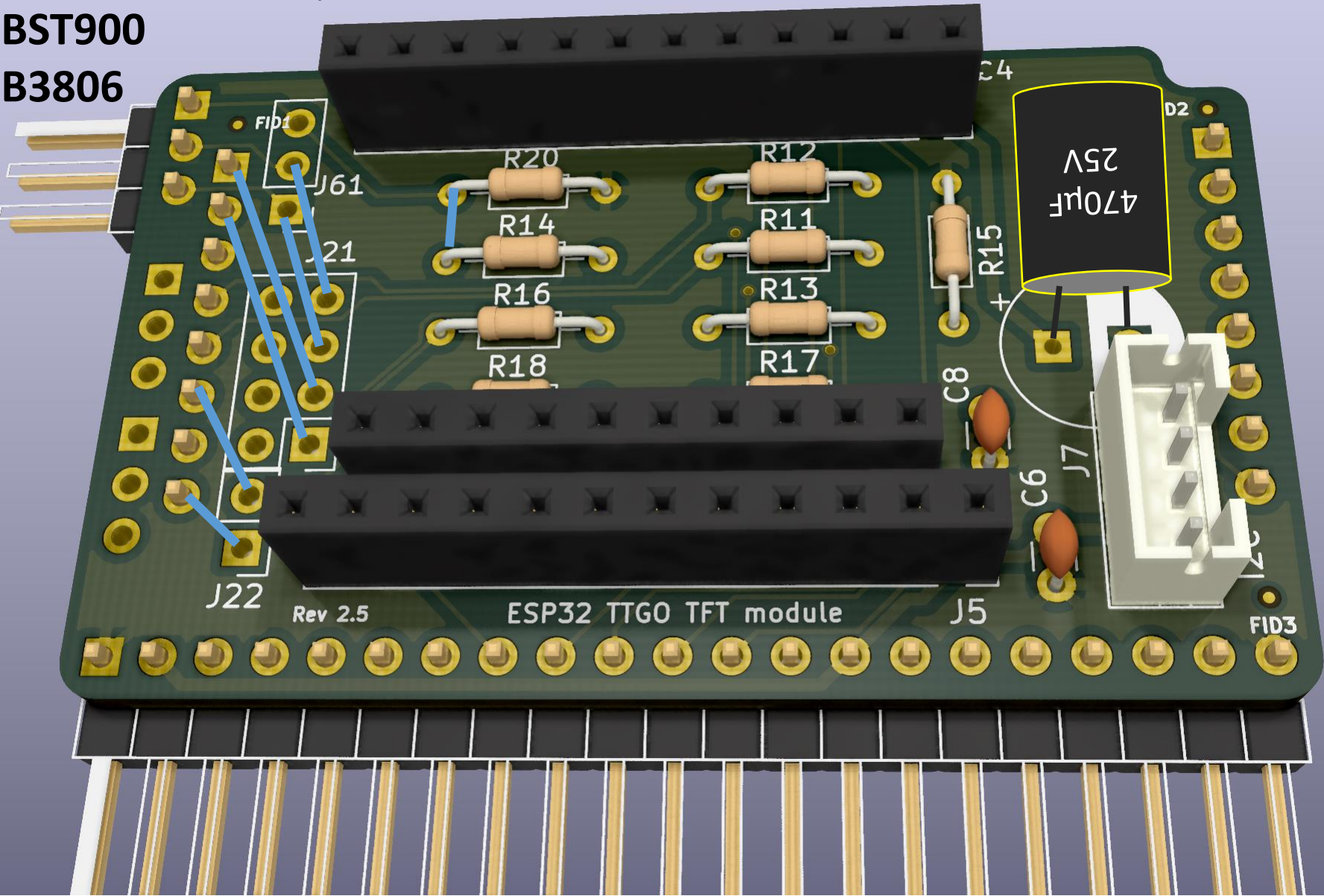Id: 1/1

PCB without Groundfilling

Fab´ed board rendered (F)

B3603

BST900

B3806

Without probes

B3603
BST900
B3806

with Iin and Iout probes and Vin on ADC1

B3603
BST900
B3806

with Iin and probes and Vin J1,3

FID1
J61
J21
R20
R14
R16
R18
R12
R11
R13
R17
R15
C4
D2
470μF 25V
C8
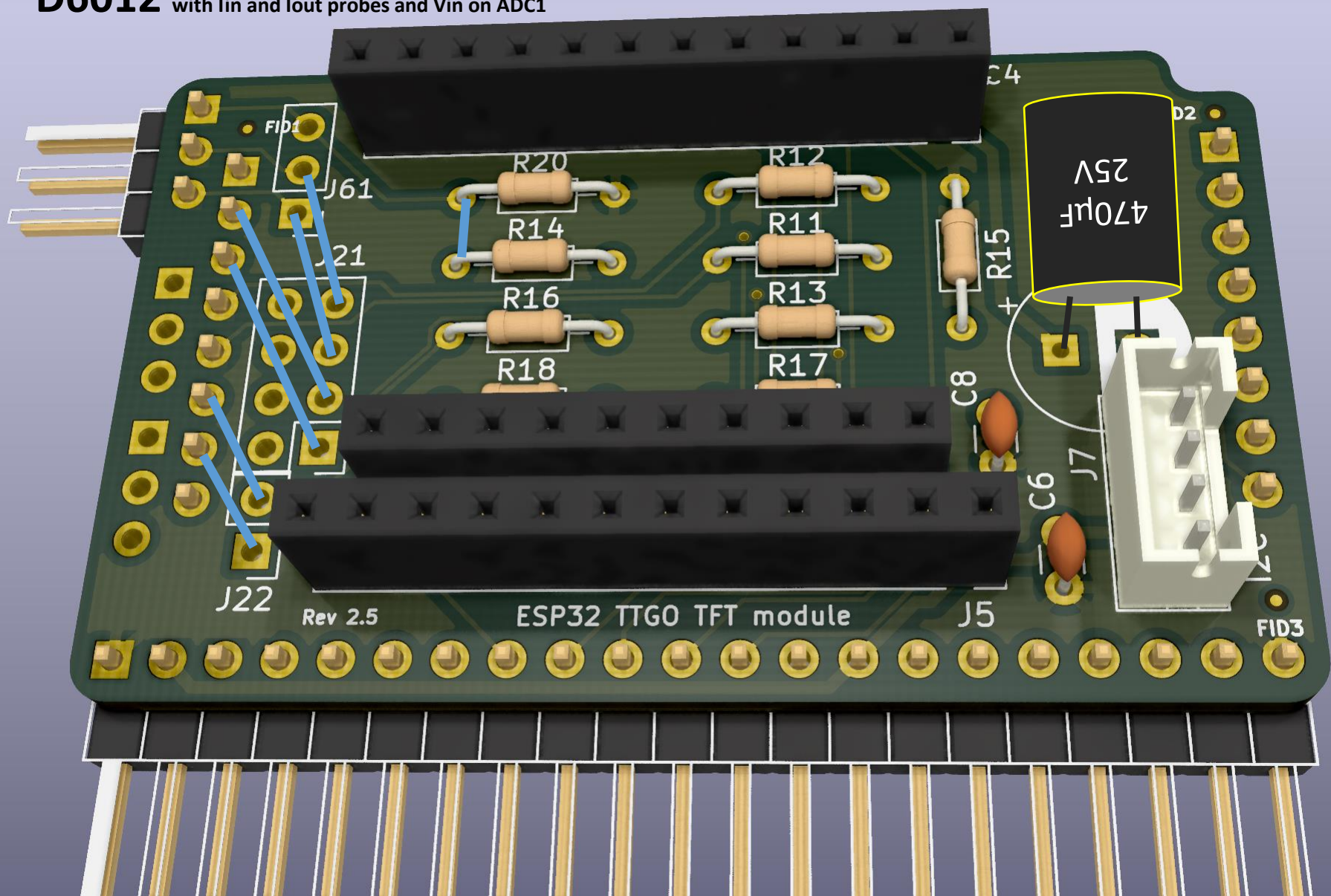C6
J7
J22
Rev 2.5
ESP32 TTGO TFT module
J5
FID3

D6008 with Iin and Iout probes and Vin on ADC1
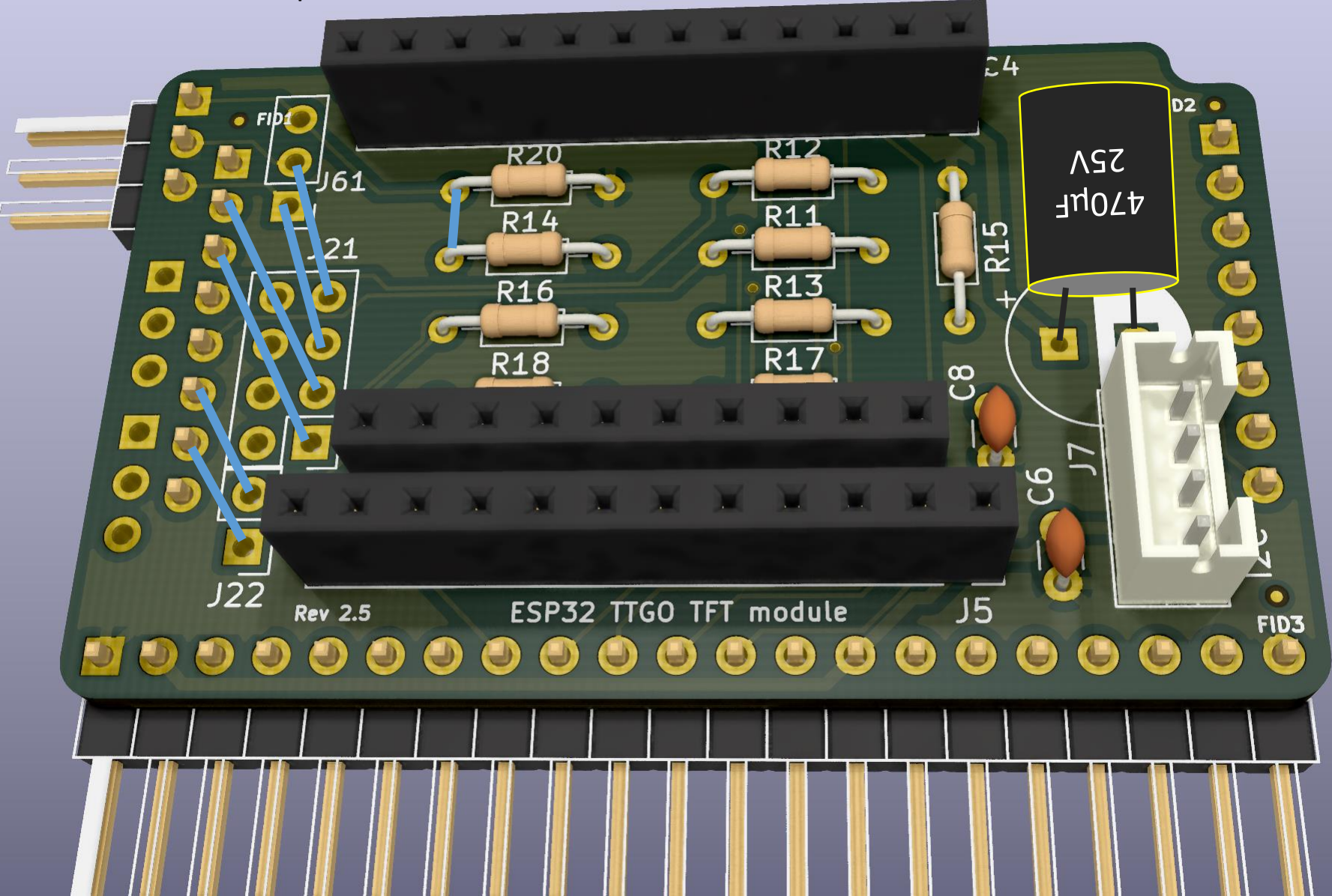
D6012 with Iin and Iout probes and Vin on ADC1

D6012 with Vin probe to A1

R20
R12
R14
R11
R16
R13
R18
R17
R15
C8
C6
J61
J21
J22
J7
FID1
470µF
25V
D2
C4
Rev 2.5
ESP32 TTGO TFT module
J5
FID3