

CERN OHL

F4GRX

Sheet: /

File: ap.sch

Title: Radio gateway (overview)

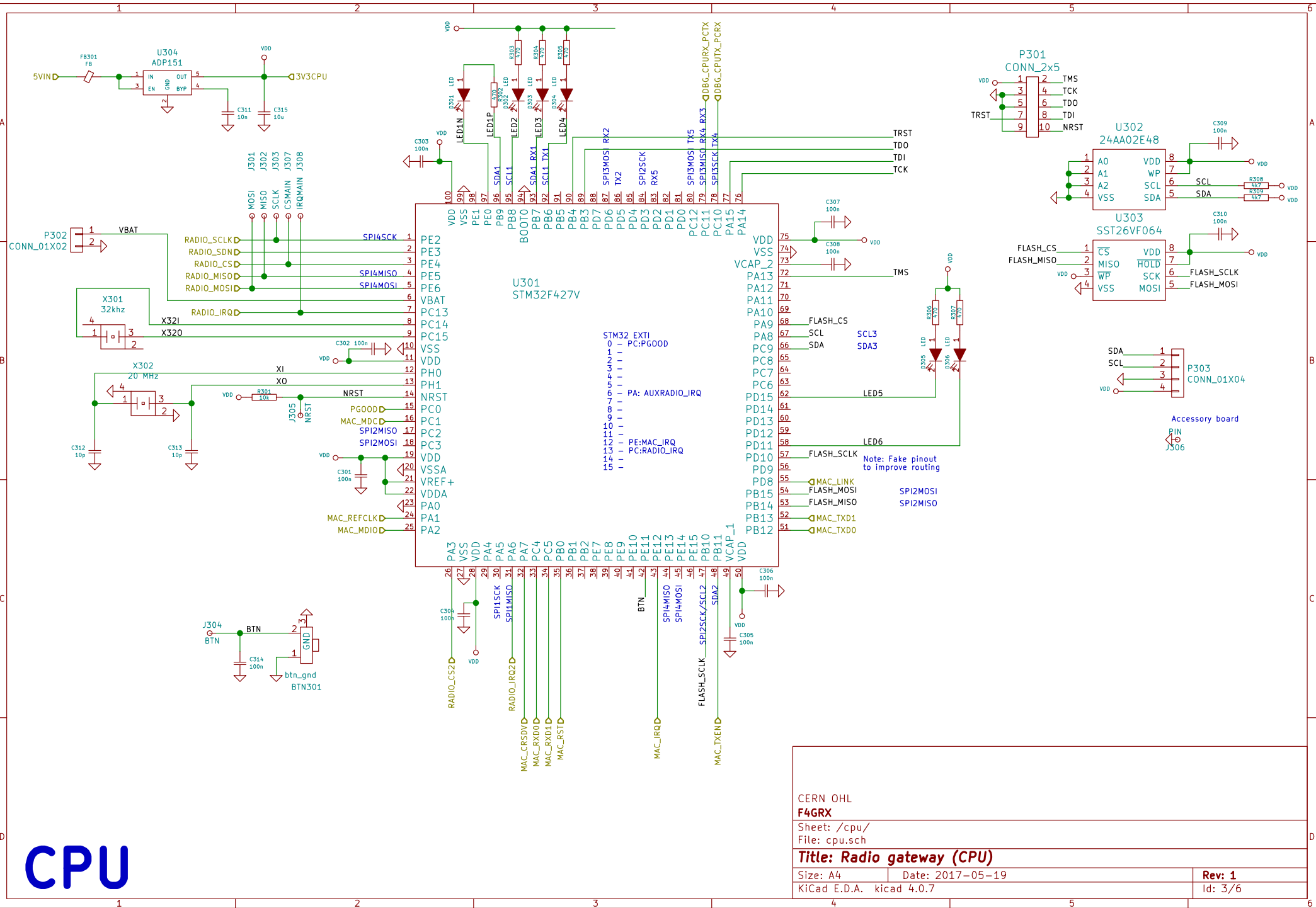
Size: A4 Date: 2017-05-19

KiCad E.D.A. kicad 4.0.7

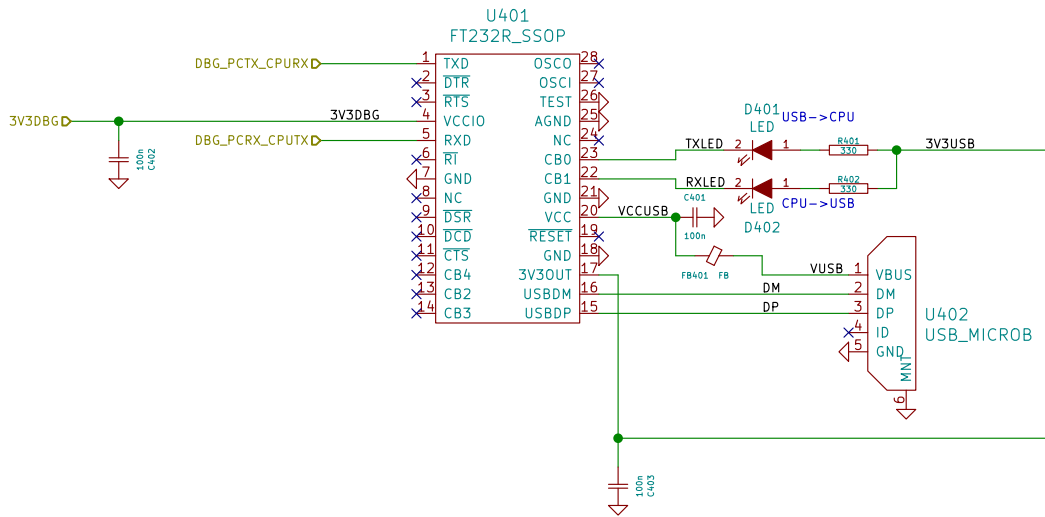
Rev: 1

Id: 1/6

CPU



DEBUG



CERN OHL

F4GRX

Sheet: /debug/

File: debug.sch

Title: Radio gateway (Debug UART)

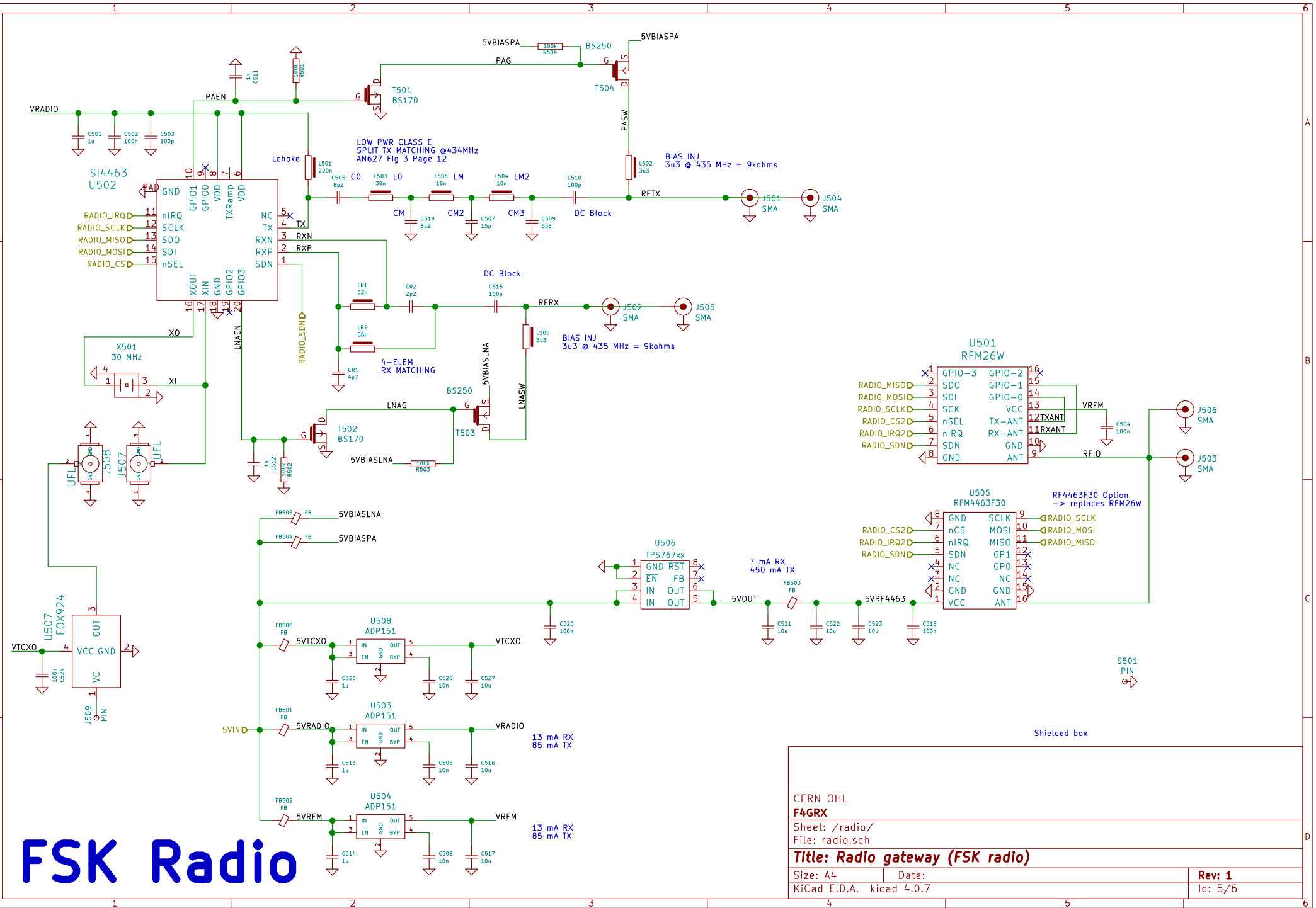
Size: A4 Date: 2017-05-19

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Rev: 1

Id: 4/6

FSK Radio



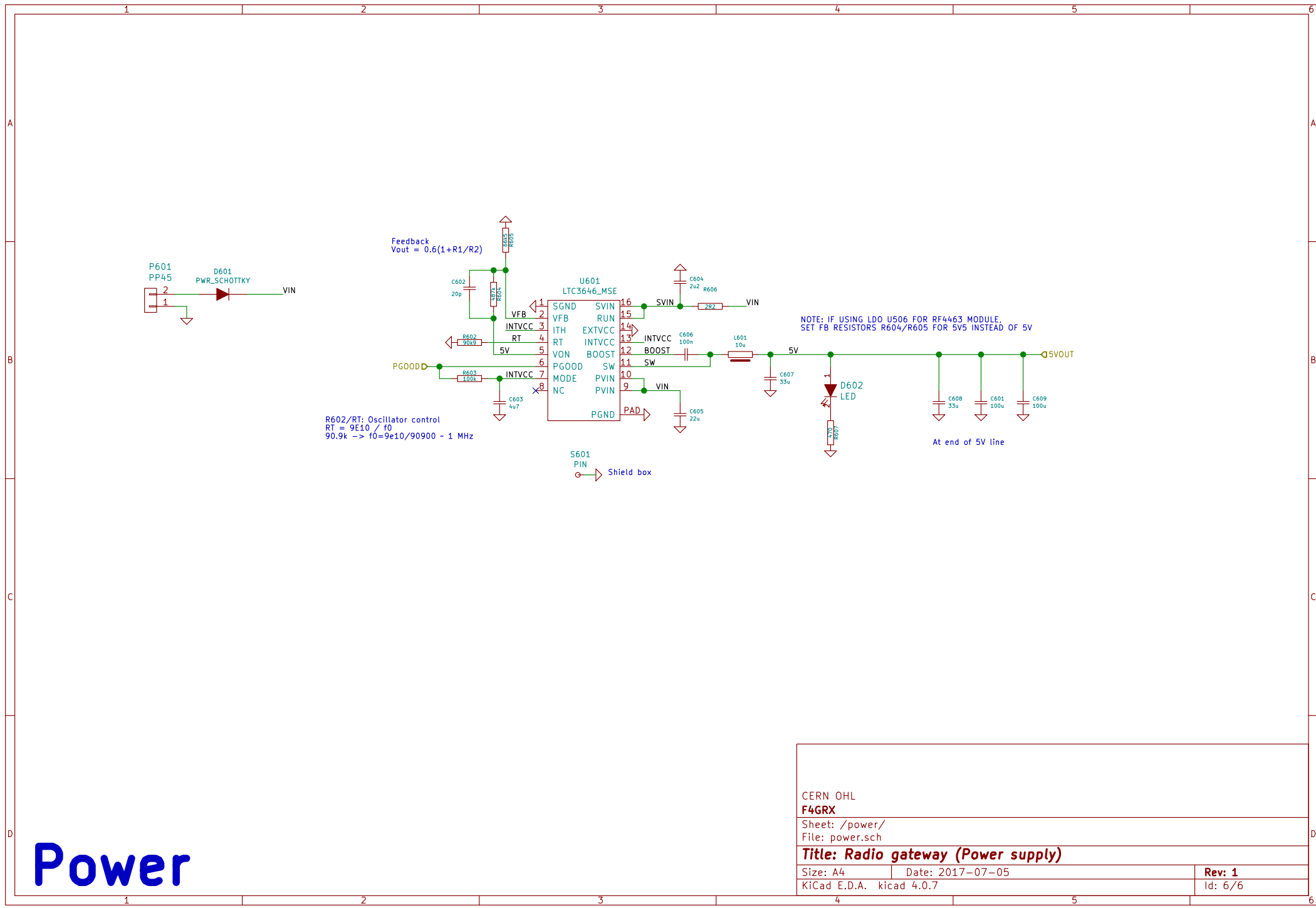
CERN OHL
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Sheet: /radio/
File: radio.sch

Title: Radio gateway (FSK radio)

Size: A4
KiCad E.D.A. kicad 4.0.7

Date:
Rev: 1
Id: 5/6



Feedback
 $V_{out} = 0.6(1+R1/R2)$

R602/RT: Oscillator control
 $RT = 9E10 / f_0$
 $90.9k \rightarrow f_0 = 9e10/90900 \sim 1\text{ MHz}$

NOTE: IF USING LDO U506 FOR RF4463 MODULE,
SET FB RESISTORS R604/R605 FOR 5V5 INSTEAD OF 5V

At end of 5V line

S601
PIN
Shield box

Power

CERN OHL
F4GRX

Sheet: /power/
File: power.sch

Title: Radio gateway (Power supply)

Size: A4 Date: 2017-07-05
KiCad E.D.A. kicad 4.0.7

Rev: 1
Id: 6/6