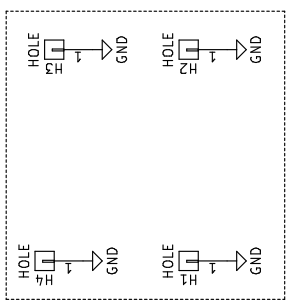


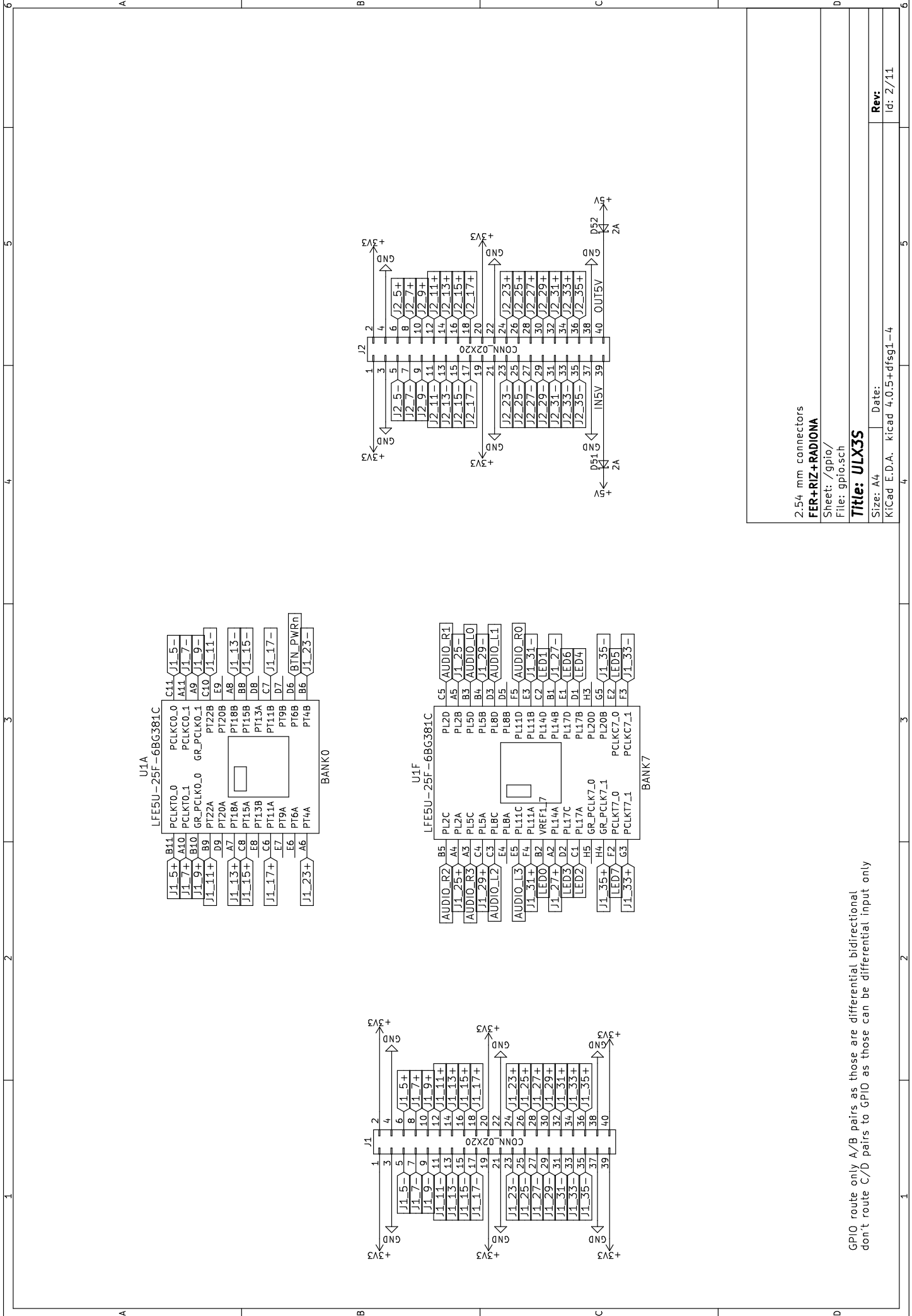
A	A	B	C	D	6
1					6
2					5
3					4
4					3
5					2
6					1



click on mouse pointer arrow on top of right toolbar and double-click on sheet to open

- Sheet: power
- File: power.sch
- Sheet: gpio
- File: gpio.sch
- Sheet: usb
- File: usb.sch
- Sheet: gpd
- File: gpd.sch
- Sheet: blinky
- File: blinky.sch
- Sheet: analog
- File: analog.sch
- Sheet: ram
- File: ram.sch
- Sheet: wifi
- File: wifi.sch
- Sheet: sdcard
- File: sdcard.sch
- Sheet: flash
- File: flash.sch

Root sheet
FER+RIZ+RADIONA
 Sheet: /
 File: ulx3s.sch
Title: ULX3S
 Size: A4 | Date:
 KiCad E.D.A. kicad 4.0.5+dfsg1-4
Rev: 0.0.1
 Id: 1/11



2.54 mm connectors
FER+RIZ+RADIONA

Sheet: /gpio/
 File: gpio.sch

Title: ULX3S

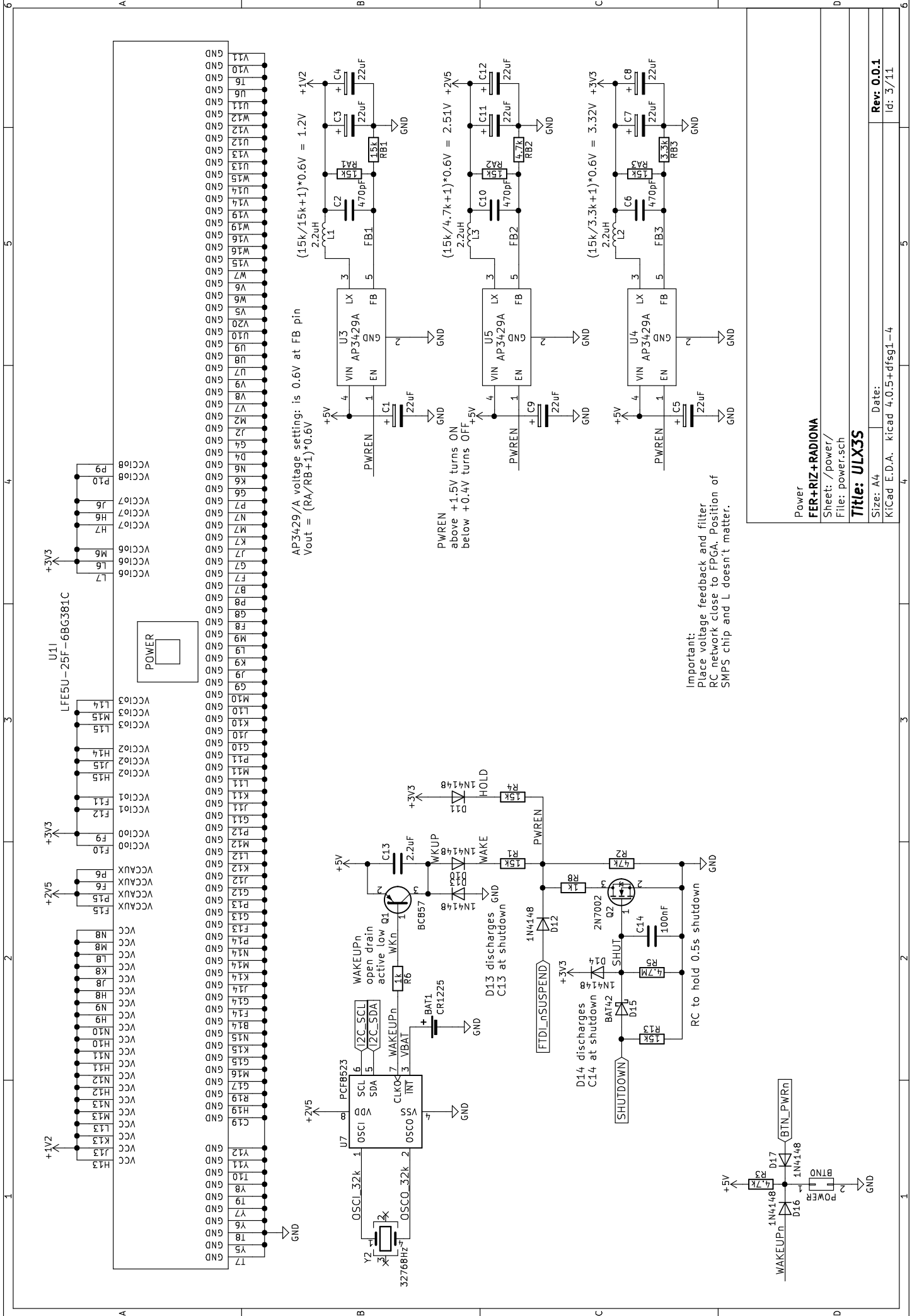
Size: A4 Date:
 KiCad E.D.A. kicad 4.0.5+dfsg1-4

GPIO route only A/B pairs as those are differential_bidirectional
 don't route C/D pairs to GPIO as those can be differential input only

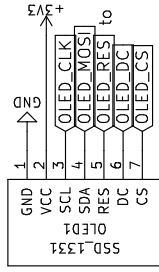
1 2 3 4 5

A B C D

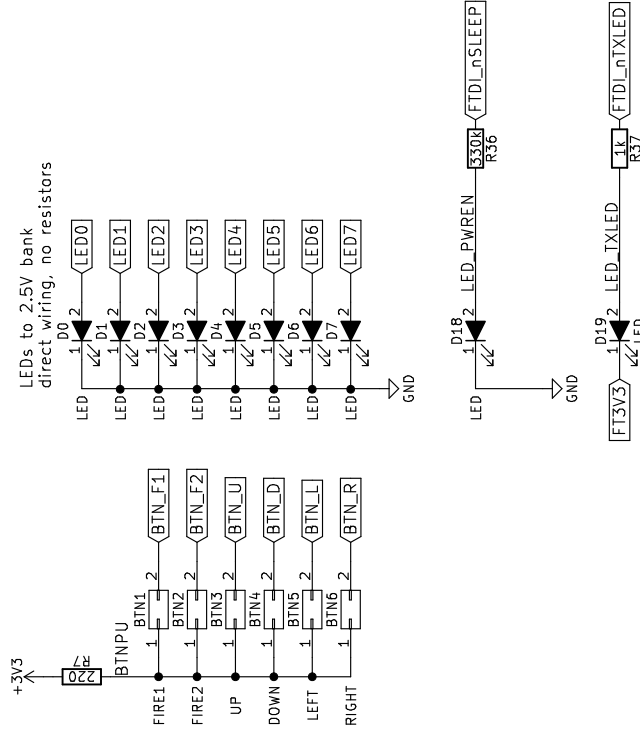
1 2 3 4 5



SSD1306 B/W or SSD1331 COLOR
 compatible OLED 0.96" or 1.3" PCB
 14x14 units
 1 unit = 2.54 mm



to global onboard reset?



LEDs to 2.5V bank
 direct wiring, no resistors

Buttons, LEDs, OLED display
FER+RIZ+RADIONA

Sheet: /blinky/
 File: blinky.sch

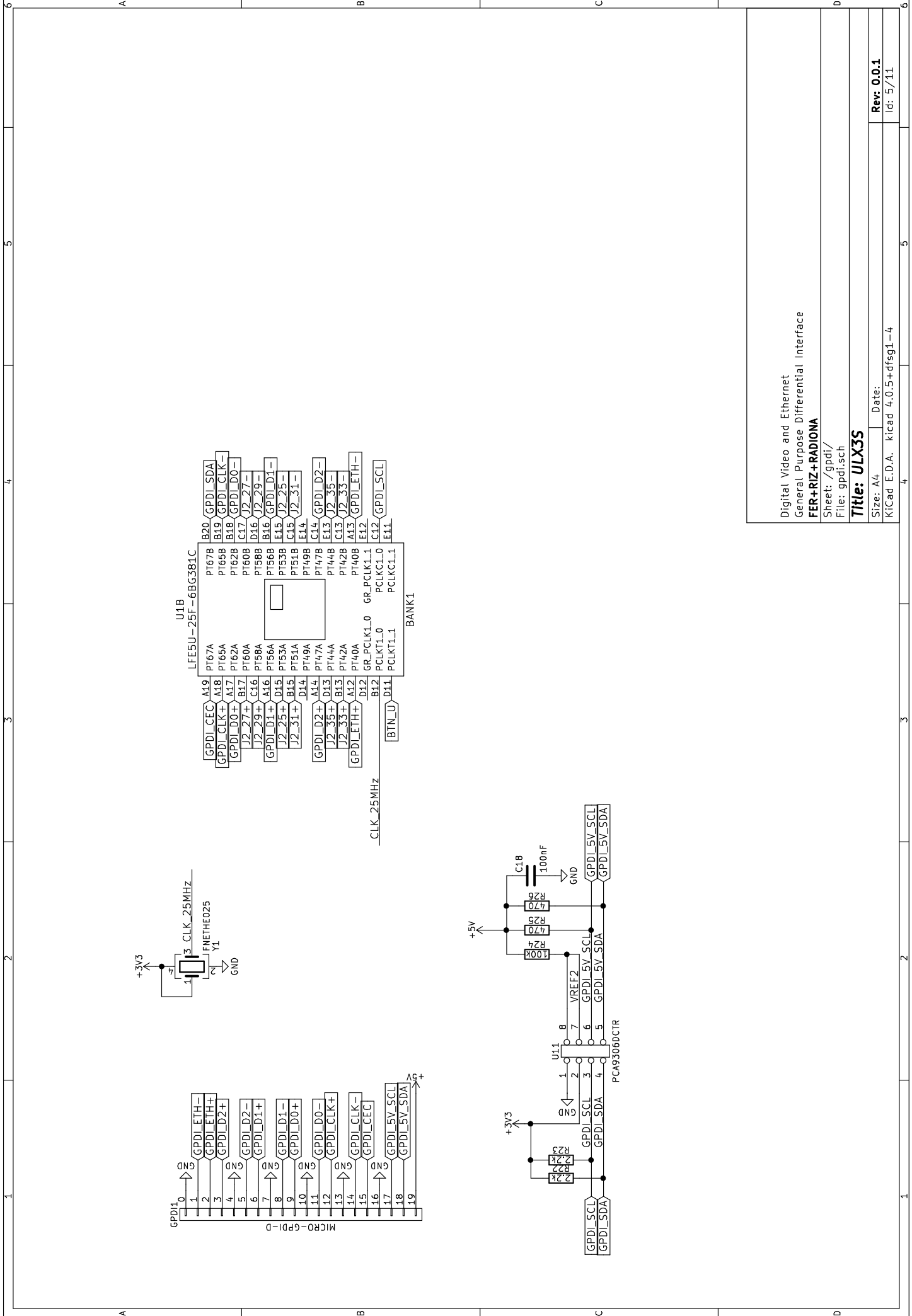
Title: ULX3S

Size: A4 Date:

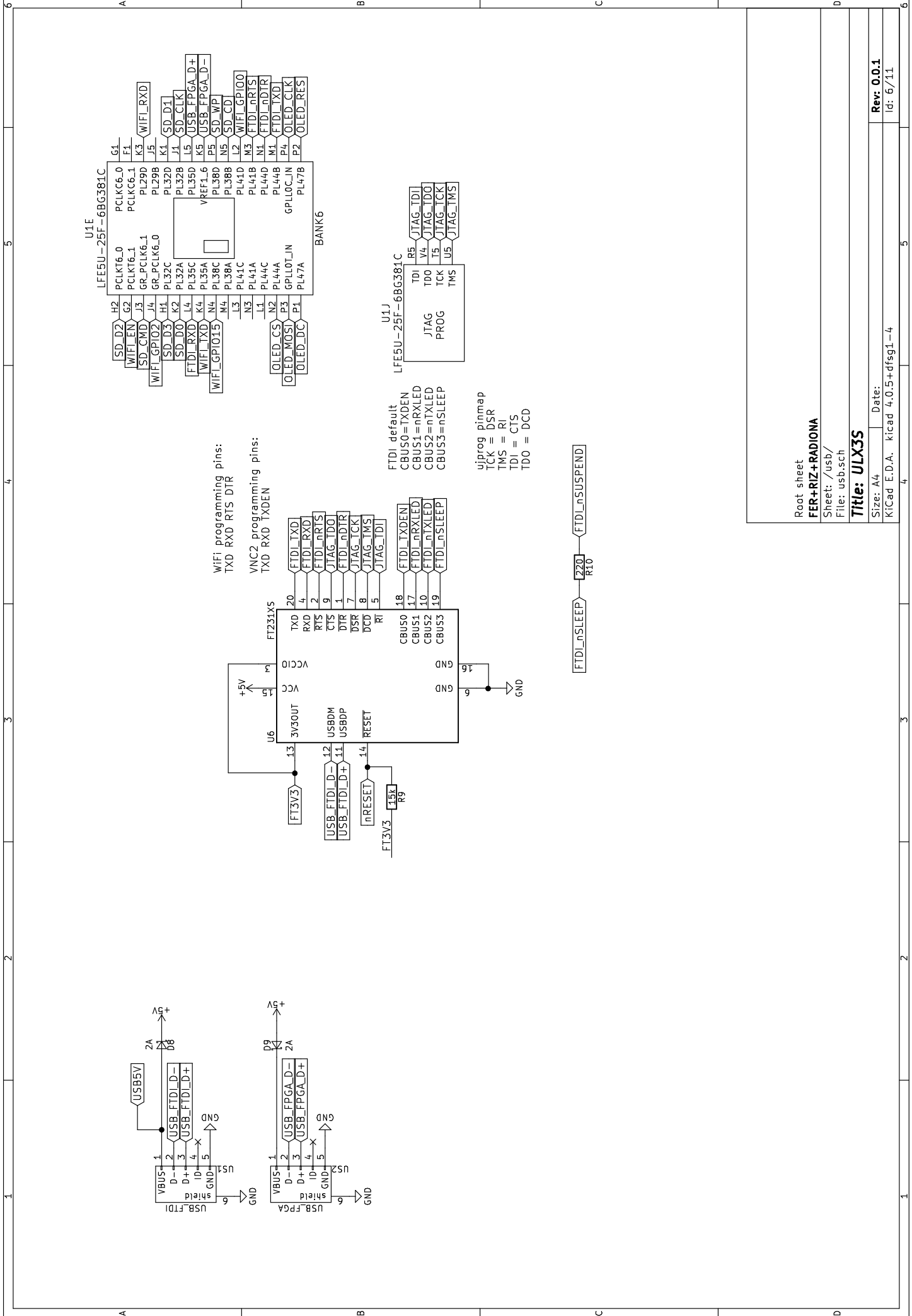
KiCad E.D.A. kicad 4.0.5+dfsg1-4

Rev: 0.0.1

Id: 4/11



Digital Video and Ethernet
 General Purpose Differential Interface
FER+RIZ+RADIONA
 Sheet: /gpd/
 File: gpd.isch
Title: ULX3S
 Size: A4 | Date:
 KiCad E.D.A. kicad 4.0.5+dfsg1-4



WiFi programming pins:
TXD RXD RTS DIR

VNC2 programming pins:
TXD RXD TXDEN

FTDI default
CBUS0=TXDEN
CBUS1=nRXLED
CBUS2=nTXLED
CBUS3=nSLEEP

ujprog pinmap
TCK = DSR
TMS = RI
TDI = CTS
TDO = DCD

FTDI_nSLEEP

R10

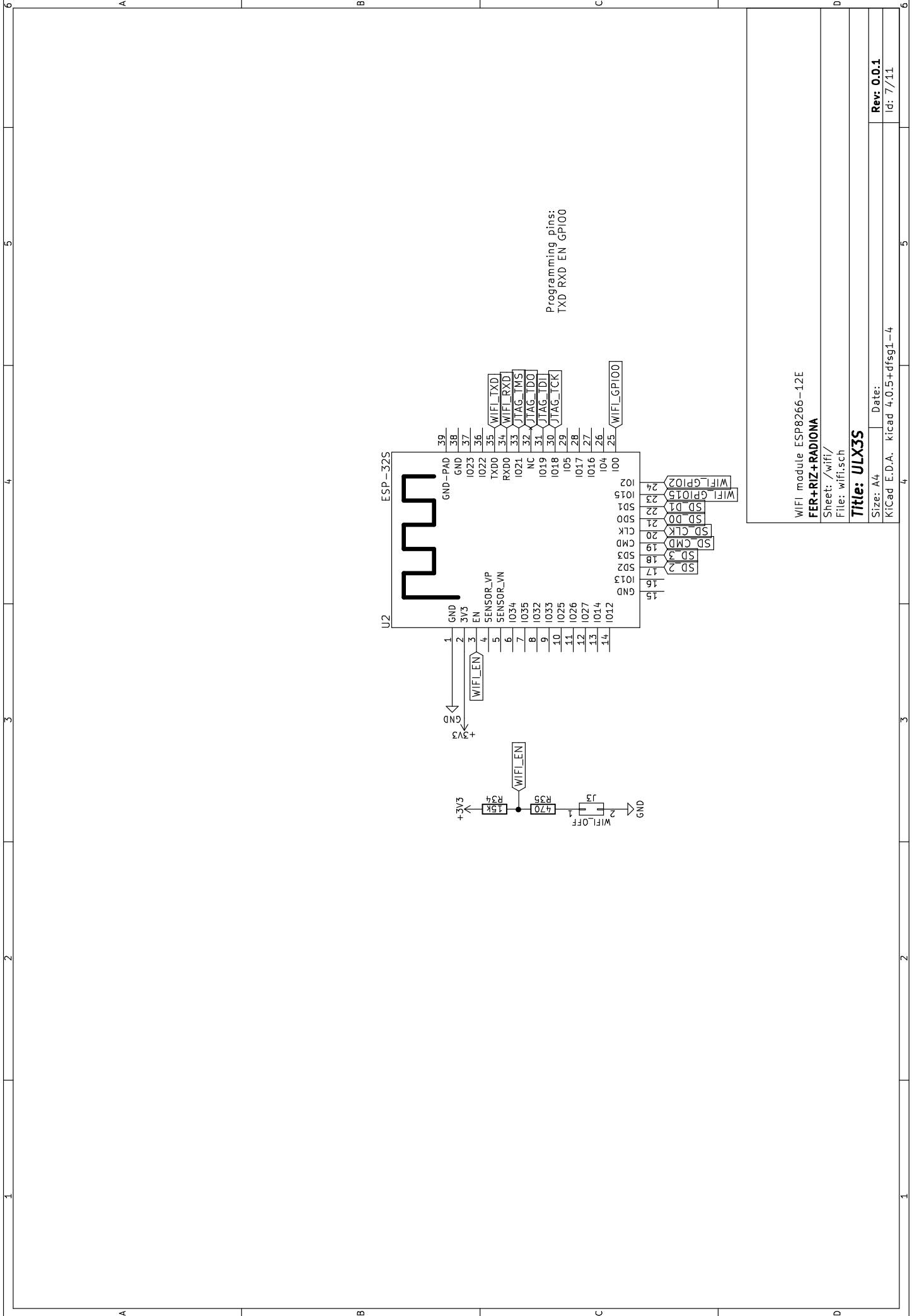
FTDI_nSUSPEND

Root sheet
FER+RIZ+RADIONA
Sheet: /usb/
File: usb.sch

Title: ULX3S

Size: A4 Date:
KiCad E.D.A. kicad 4.0.5+dfsg1-4

Rev: 0.0.1
Id: 6/11



Programming pins:
TXD RXD EN GPIO0

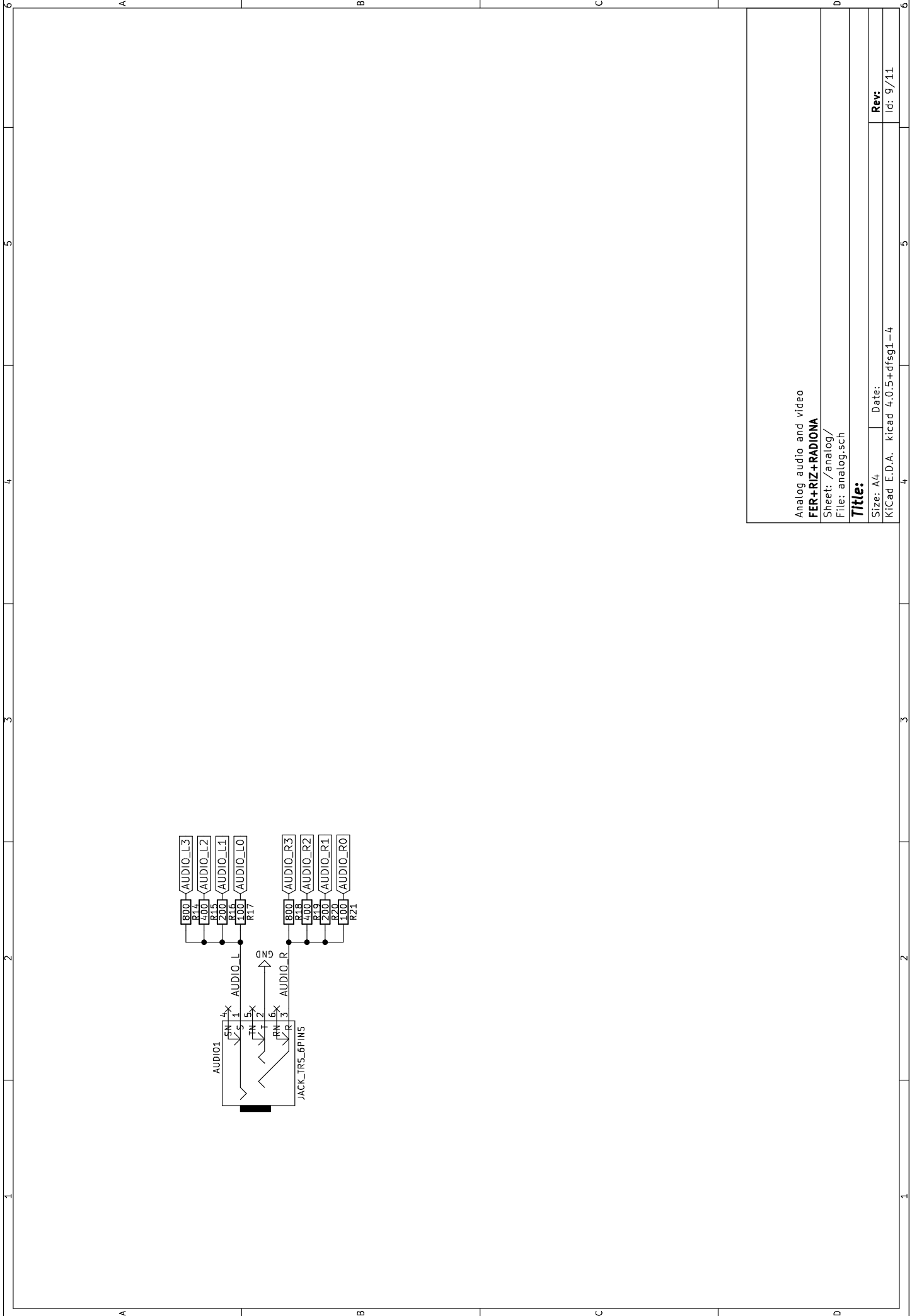
WIFI module ESP8266-12E
FER+RIZ+RADIONA

Sheet: /wifi/
File: wifi.sch

Title: ULX3S

Size: A4 Date:
KICad E.D.A. kicad 4.0.5+dfsg1-4

Rev. 0.0.1
Id: 7/11



Analog audio and video

FER+RIZ+RADIONA

Sheet: /analog/

File: analog.sch

Title:

Size: A4 Date:

KiCad E.D.A. kicad 4.0.5+dfsg1-4

Rev:

Id: 9/11

