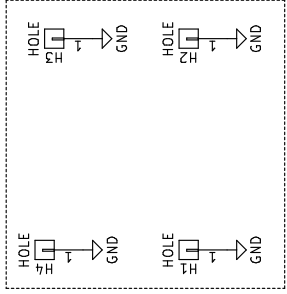
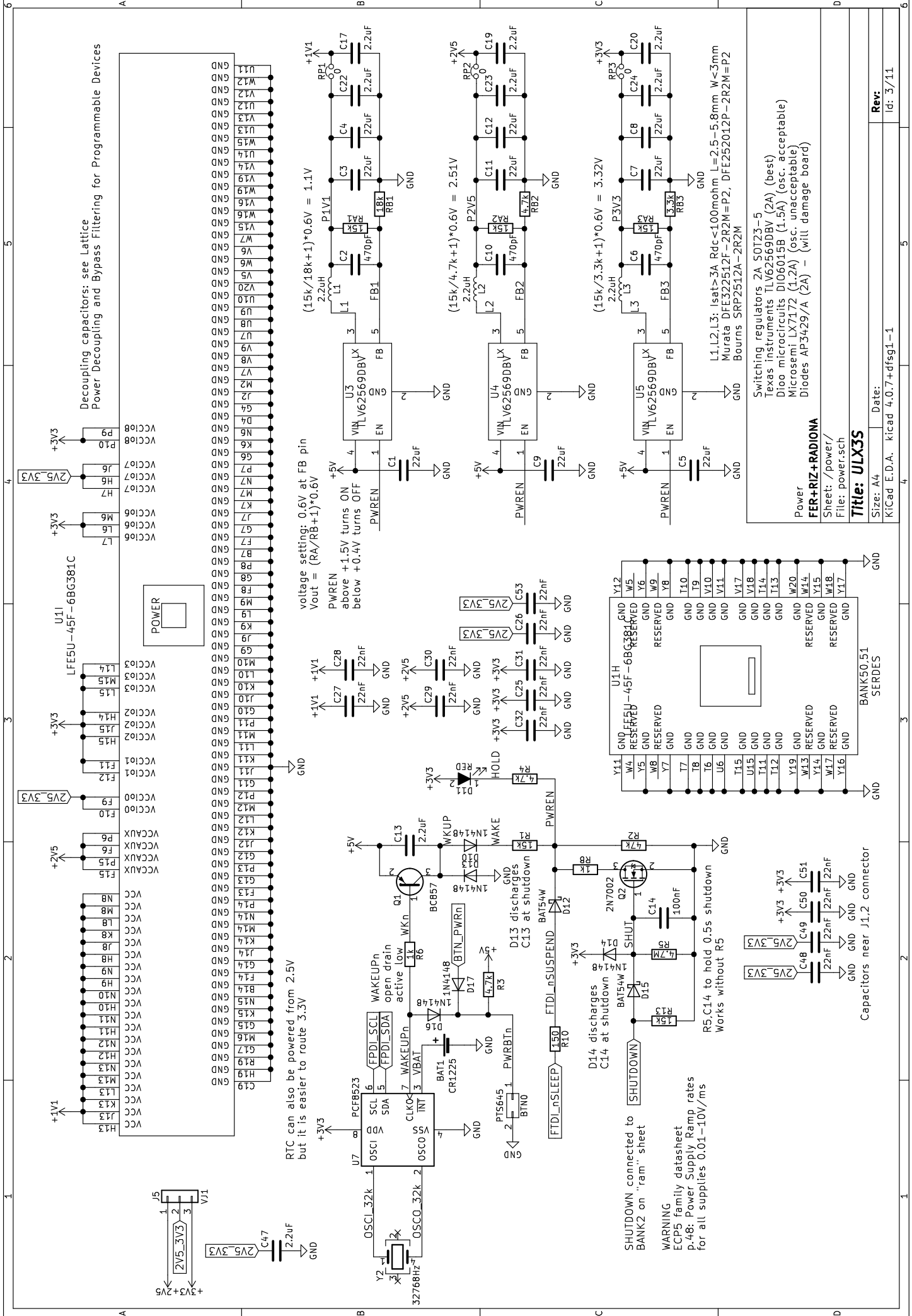


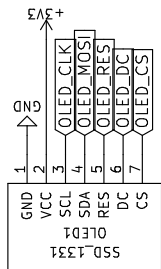
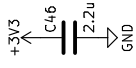
A	A	B	C	D																								
			<p>click on mouse pointer arrow on top of right toolbar and double-click on sheet to open</p> <table border="1"> <tr> <td>Sheet: power</td> <td>Sheet: usb</td> <td>Sheet: blinky</td> <td>Sheet: ram</td> <td>Sheet: sdcard</td> </tr> <tr> <td>File: power.sch</td> <td>File: usb.sch</td> <td>File: blinky.sch</td> <td>File: ram.sch</td> <td>File: sdcard.sch</td> </tr> <tr> <td>Sheet: gpio</td> <td>Sheet: gpd</td> <td>Sheet: analog</td> <td>Sheet: wifi</td> <td>Sheet: flash</td> </tr> <tr> <td>File: gpio.sch</td> <td>File: gpd.sch</td> <td>File: analog.sch</td> <td>File: wifi.sch</td> <td>File: flash.sch</td> </tr> </table>	Sheet: power	Sheet: usb	Sheet: blinky	Sheet: ram	Sheet: sdcard	File: power.sch	File: usb.sch	File: blinky.sch	File: ram.sch	File: sdcard.sch	Sheet: gpio	Sheet: gpd	Sheet: analog	Sheet: wifi	Sheet: flash	File: gpio.sch	File: gpd.sch	File: analog.sch	File: wifi.sch	File: flash.sch	<p>Root sheet  <b>FER+RIZ+RADIONA</b>  Sheet: /  File: ulx3s.sch  <b>Title: ULX3S</b></p> <table border="1"> <tr> <td>Size: A4</td> <td>Date:</td> </tr> <tr> <td colspan="2">KiCad E.D.A. kicad 4.0.7+dfsg1-1</td> </tr> </table>	Size: A4	Date:	KiCad E.D.A. kicad 4.0.7+dfsg1-1	
Sheet: power	Sheet: usb	Sheet: blinky	Sheet: ram	Sheet: sdcard																								
File: power.sch	File: usb.sch	File: blinky.sch	File: ram.sch	File: sdcard.sch																								
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KiCad E.D.A. kicad 4.0.7+dfsg1-1																												
				<p>4</p>																								
				<p>6</p>																								



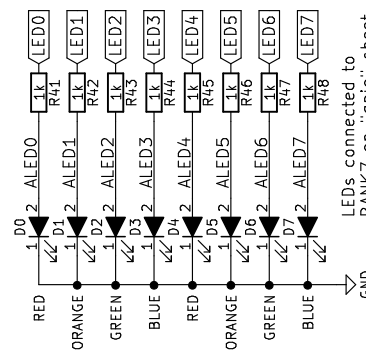




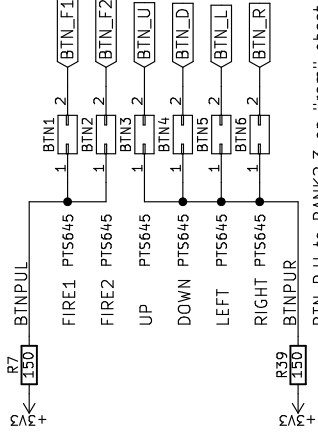
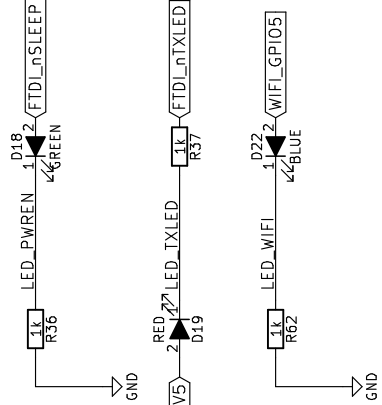
SSD1306 B/W or SSD1331 COLOR compatible OLED 0.96" or 1.3" PCB 1.4x1.4 units 1 unit = 2.54 mm



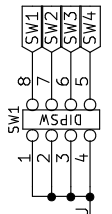
OLED connected to BANK6 on "usb" sheet



LEDs connected to BANK7 on "gpio" sheet



BTN\_R,U to BANK2,3 on "ram" sheet  
BTN\_F1,F2,D,L to BANK8 on "flash" sheet



DIP switch connected to BANK0 on 'gpio' sheet

To fix issues with FT231XS rev A,B,C Short-circuit D18 LED, but then board cannot keep awake by USB. chip rev D works properly See TN140\_FT231X Errata

TXLED blinks when FPGA sends data to FTDI

GPIO2 on PCB v1.7

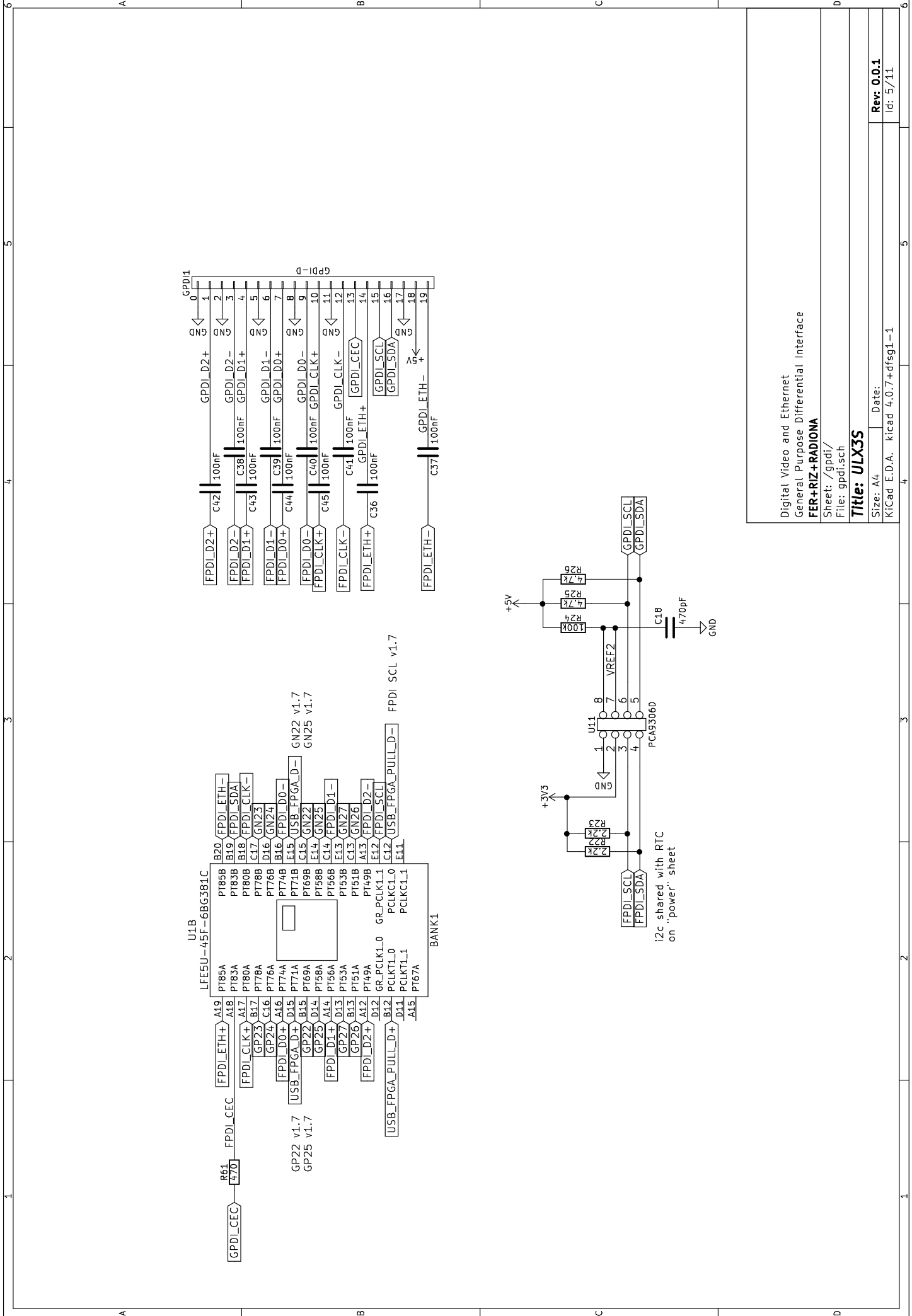
Buttons, LEDs, OLED display  
**FER+RIZ+RADIONA**

Sheet: /blinky/  
File: blinky.sch

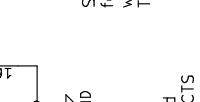
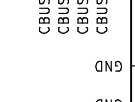
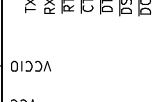
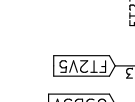
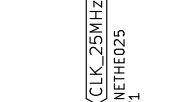
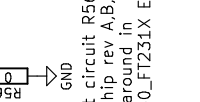
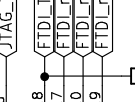
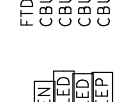
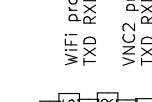
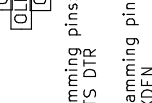
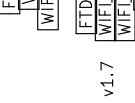
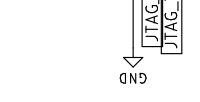
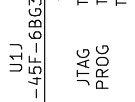
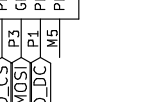
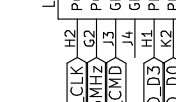
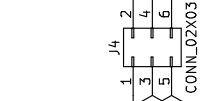
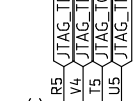
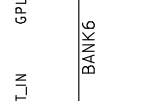
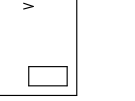
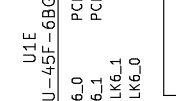
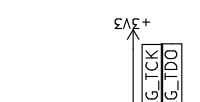
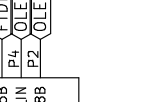
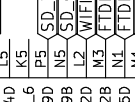
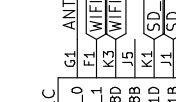
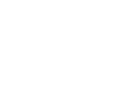
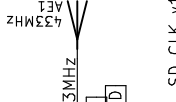
**Title: ULX3S**

Size: A4 Date:  
KICad E.D.A. kicad 4.0.7+dfsg1-1

Rev: 0.0.1  
Id: 4/11



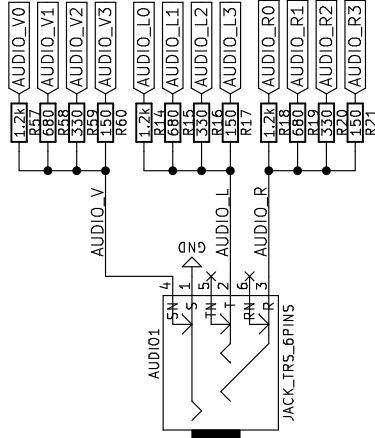
Digital Video and Ethernet  
 General Purpose Differential Interface  
**FER+RIZ+RADIONA**  
 Sheet: /gpd/  
 File: gpd.isch  
**Title: ULX3S**  
 Size: A4 | Date:  
 KiCad E.D.A. kicad 4.0.7+dfsg1-1





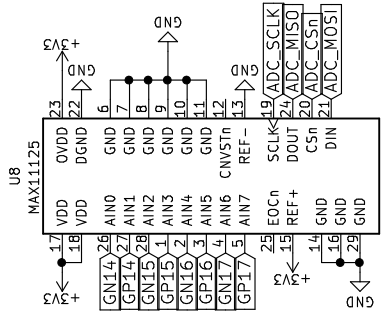






JACK pinout for SJ-43516-SMT-TR  
<http://www.cui.com/product/resource/sj-4351x-smt-series.pdf>  
 pin 1 - sleeve (GND)  
 pin 2 - tip (left channel)  
 pin 3 - ring1 (right channel)  
 pin 4 - ring2 (video)  
 pin 5 - tip switch  
 pin 6 - ring1 switch

Audio connected to BANK7 on "gpio" sheet



ADC SPI connected to BANK3 of "ram" sheet

Analog audio and video  
**FER+RIZ+RADIONA**

Sheet: /analog/  
 File: analog.sch

**Title:**

Size: A4 Date:  
 KiCad E.D.A. kicad 4.0.7+dfsg1-1

Rev:  
 Id: 9/11



