Power

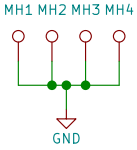
Radioberry-PWR.sch

GPIO

Raspberry-GPIO.sch

Frontend

Radioberry-Frontend.sch



PA3GSB

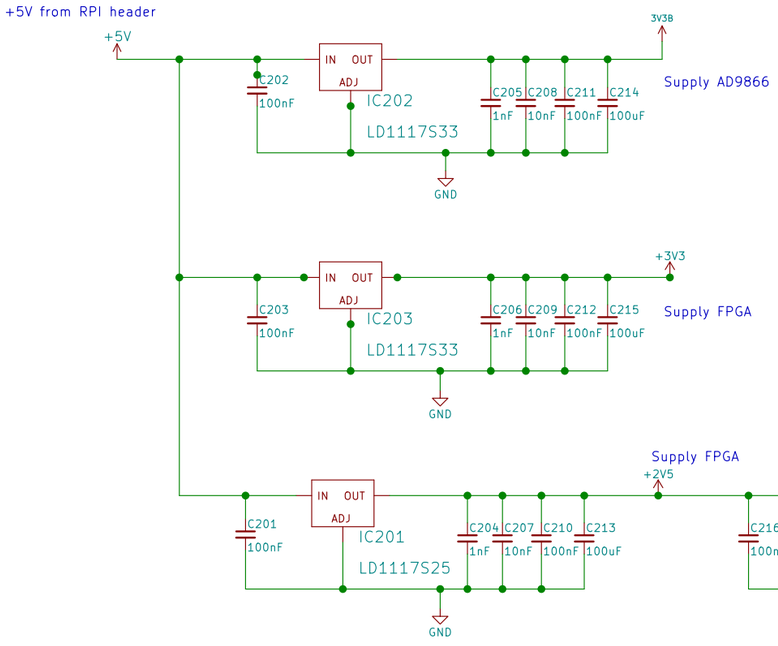
AppMind

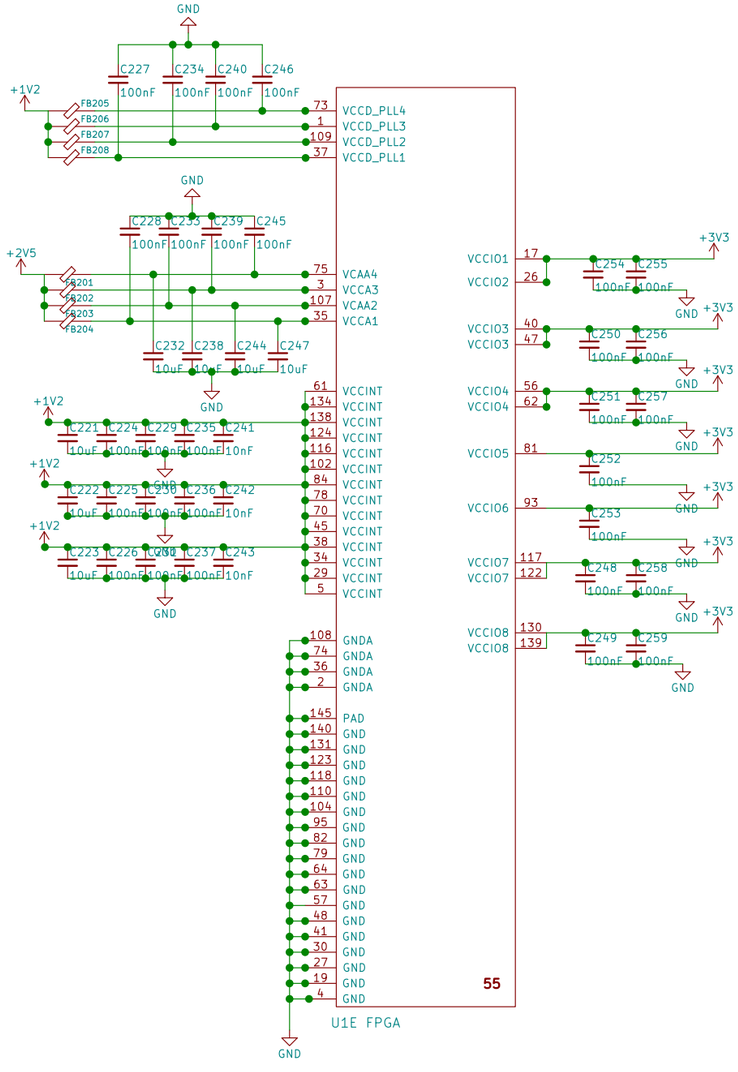
Sheet: /

File: Radioberry.sch

Title: RadioBerry V2.0

Size: A4	Date: 2017-11-29	**Rev: beta2**
KiCad E.D.A. kicad 4.0.6		Id: 1/4

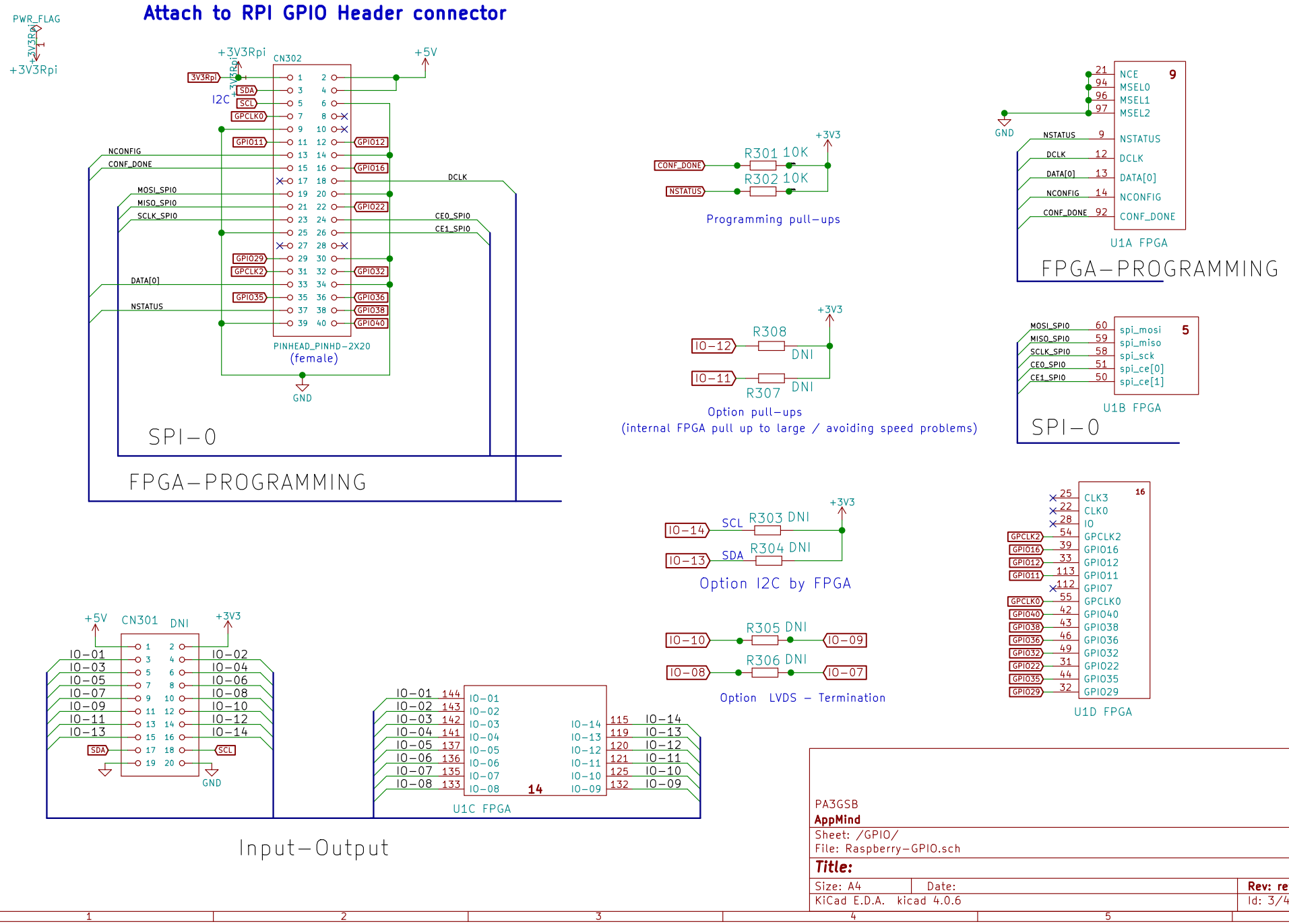


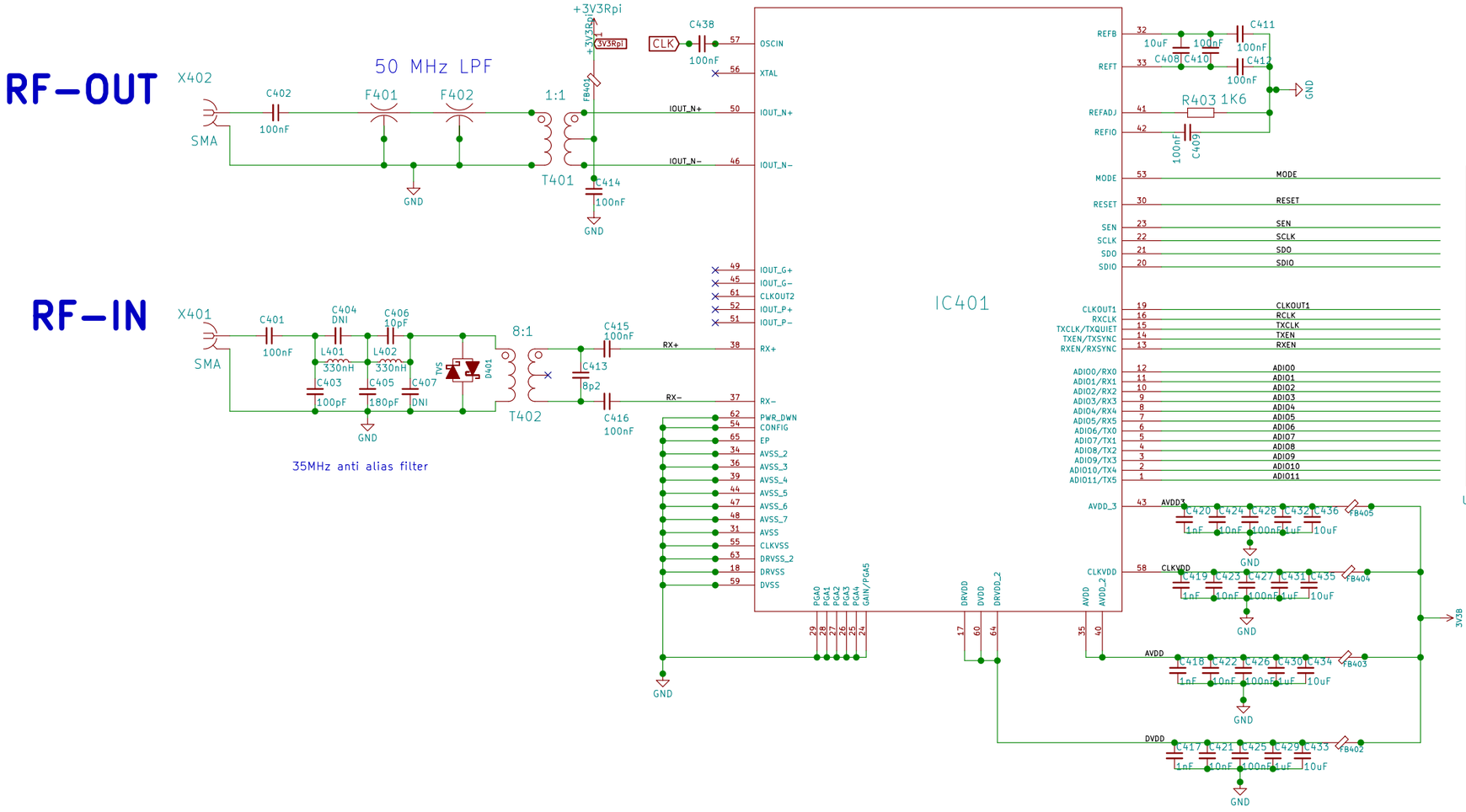


Cyclone 10LP : Possible use : 10CL016 or 10CL025

PA3GSB
AppMind

Sheet: /Power/		
File: Radioberry-PWR.sch		
Title:		
Size: A3	Date:	**Rev: rev 2.0-beta1**
KiCad E.D.A. kicad 4.0.6		Id: 2/4


Attach to RPI GPIO Header connector
PWR_FLAG
+3V3Rpi
+3V3Rpi
CN302
+5V
3V3Rpi
I2C
SDA
SCL
GPCLK0
GPIO11
GPIO12
NCONFIG
CONF_DONE
GPIO16
DCLK
MOSI_SPI0
MISO_SPI0
GPIO22
SCLK_SPI0
CE0_SPI0
CE1_SPI0
GPIO29
GPCLK2
GPIO32
DATA[0]
GPIO35
GPIO36
NSTATUS
GPIO38
GPIO40
PINHEAD_PINHD-2X20
(female)
GND
SPI-0
FPGA-PROGRAMMING
+3V3
R301 10K
R302 10K
CONF_DONE
NSTATUS
Programming pull-ups
+3V3
R308
DNI
IO-12
IO-11
R307
DNI
Option pull-ups
(internal FPGA pull up to large / avoiding speed problems)
+3V3
IO-14
SCL
R303 DNI
IO-13
SDA
R304 DNI
Option I2C by FPGA
R305 DNI
IO-10
IO-09
R306 DNI
IO-08
IO-07
Option LVDS - Termination
+5V
CN301
DNI
+3V3
IO-01
IO-02
IO-03
IO-04
IO-05
IO-06
IO-07
IO-08
IO-09
IO-10
IO-11
IO-12
IO-13
IO-14
SDA
SCL
GND
Input-Output
IO-01 144
IO-02 143
IO-03 142
IO-04 141
IO-05 137
IO-06 136
IO-07 135
IO-08 133
14
U1C FPGA
115 IO-14
119 IO-13
120 IO-12
121 IO-11
125 IO-10
132 IO-09
GND
NCE
MSEL0
MSEL1
MSEL2
9
NSTATUS
DCLK
DATA[0]
NCONFIG
CONF_DONE
U1A FPGA
FPGA-PROGRAMMING
MOSI_SPI0
MISO_SPI0
SCLK_SPI0
CE0_SPI0
CE1_SPI0
spi_mosi
spi_miso
spi_sck
spi_ce[0]
spi_ce[1]
5
U1B FPGA
SPI-0
CLK3
CLK0
IO
16
GPCLK2
GPIO16
GPIO12
GPIO11
GPIO7
GPCLK0
GPIO40
GPIO38
GPIO36
GPIO32
GPIO22
GPIO35
GPIO29
U1D FPGA
PA3GSB
AppMind
Sheet: /GPIO/
File: Raspberry-GPIO.sch
Title:
Size: A4
Date:
Rev: rev 2.0-beta1
KiCad E.D.A. kicad 4.0.6
Id: 3/4



PA3GSB
AppMind

Sheet: /Frontend/		
File: Radioberry-Frontend.sch		
Title:		
Size: A3	Date:	**Rev: rev 2.0-beta1**
KiCad E.D.A. kicad 4.0.6		Id: 4/4