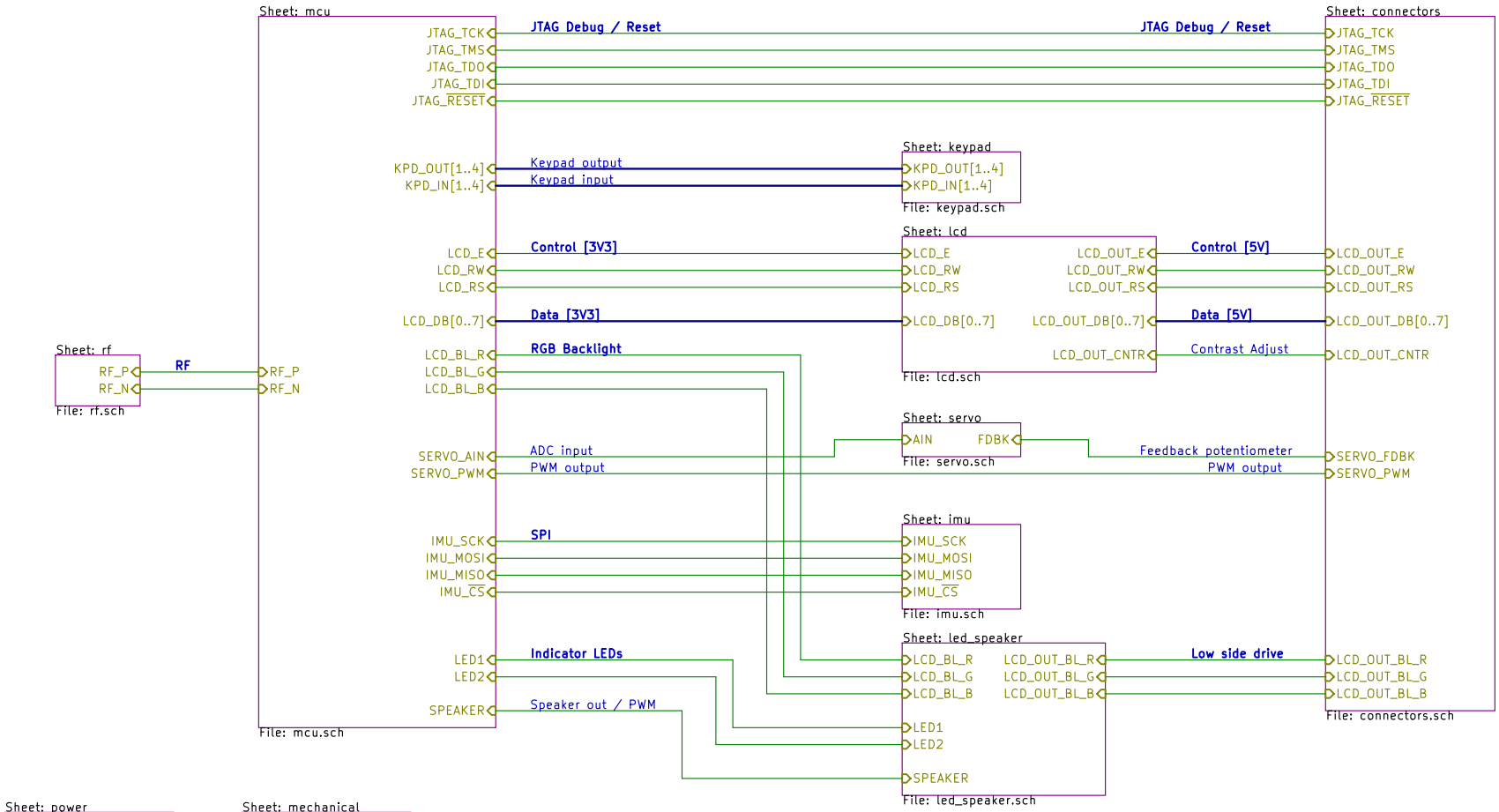

RES 0603 1/8W 5% UNLESS OTHERWISE NOTED
CAPS 0603 16V 20% UNLESS OTHERWISE NOTED

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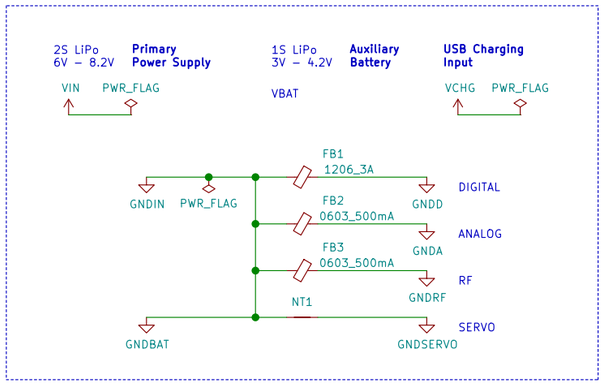
Sheet: /
File: pandora.sch

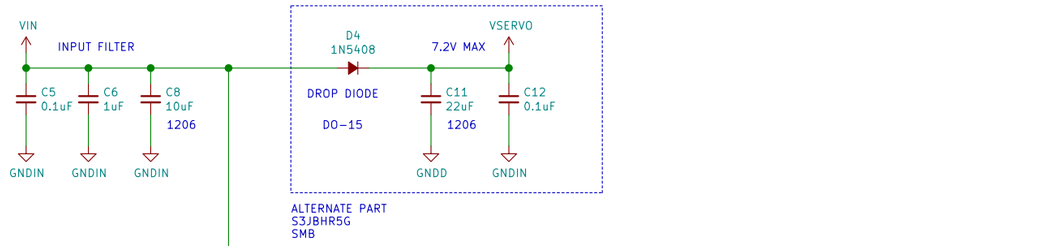
Title: Pandora CC2652R Development Board

Size: A4	Date: 2020-02-09	**Rev: A**
KiCad E.D.A. kicad (5.1.5)-2		Id: 1/11

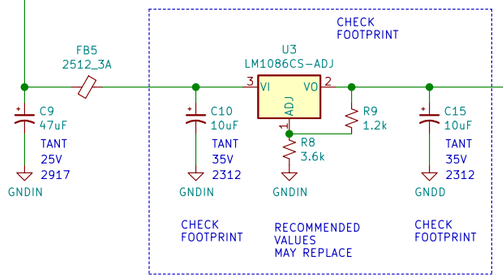
POWER LAYOUT



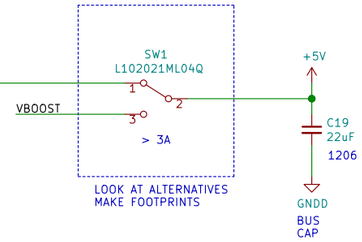
SERVO POWER



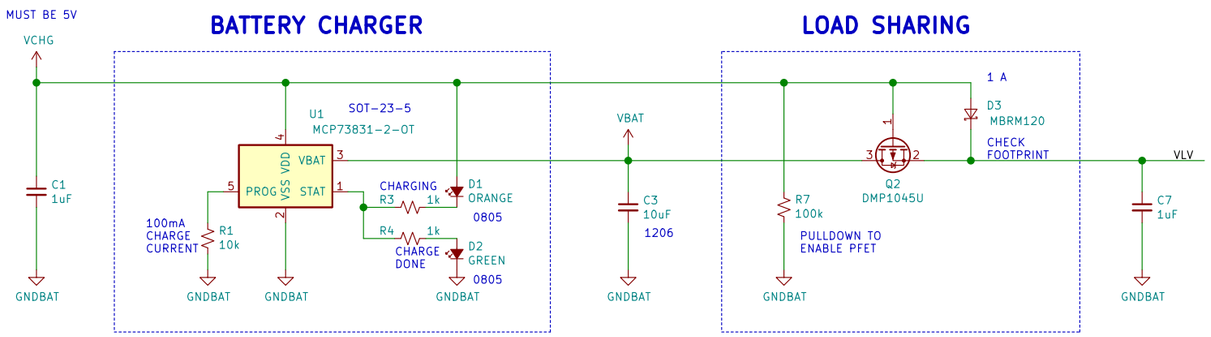
5V LIN REG



POWER SELECT

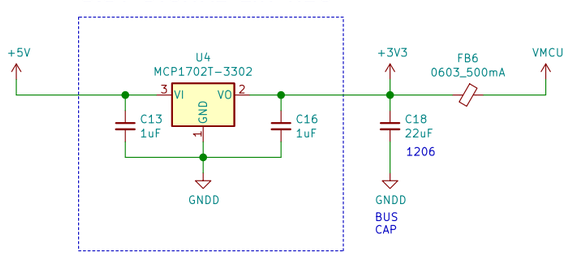


BATTERY CHARGER

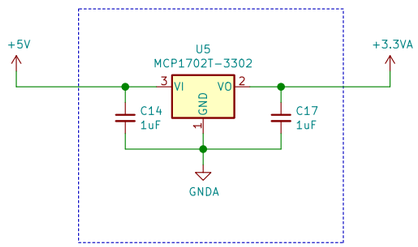


LOAD SHARING

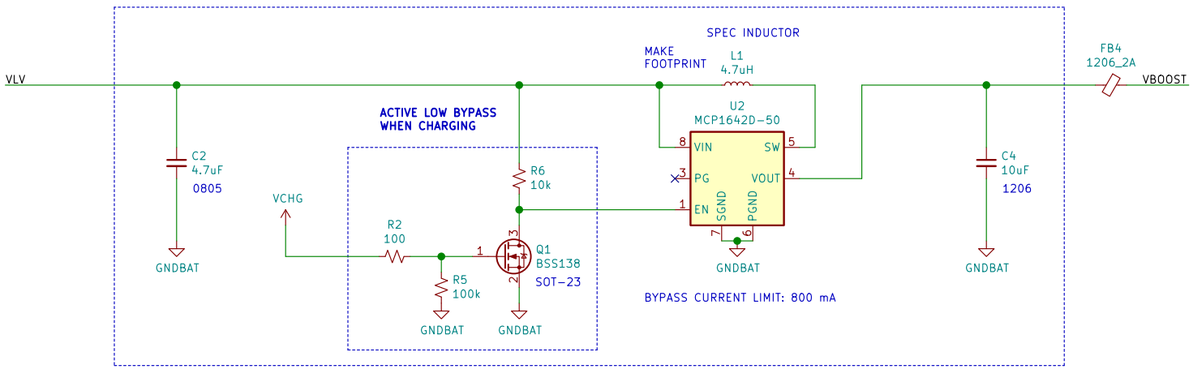
3.3V DIGITAL LIN REG



3.3V ANALOG LIN REG



BATTERY BOOST CONVERTER



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Title: Pandora CC2652R Development Board

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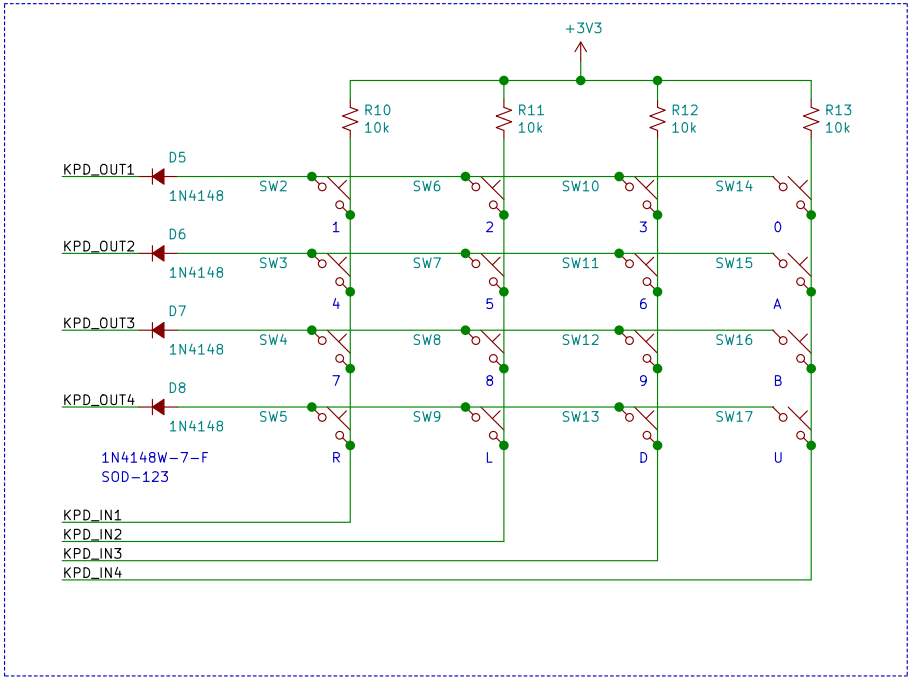
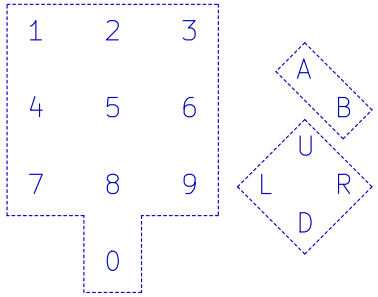
KPD_OUT[1..4]
KPD_OUT1
KPD_OUT2
KPD_OUT3
KPD_OUT4

KPD_IN[1..4]
KPD_IN1
KPD_IN2
KPD_IN3
KPD_IN4

KEYPAD



KEYPAD LAYOUT



BUTTONS	PTS645 S K 50 SMTR92 LFS 6mm SMT
CAP COLOR	
NUMERIC A, B D-PAD	BLACK RED BLUE

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File: keypad.sch

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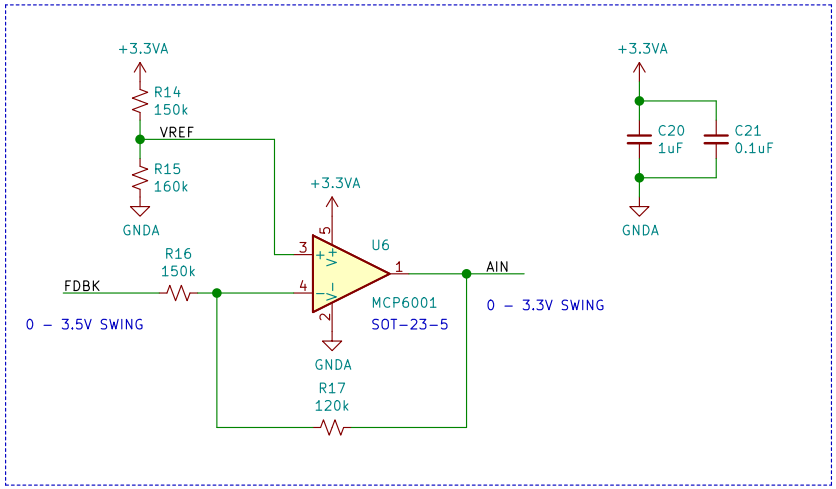
FDBK FDBK

AIN AIN

SERVO FEEDBACK SCALE



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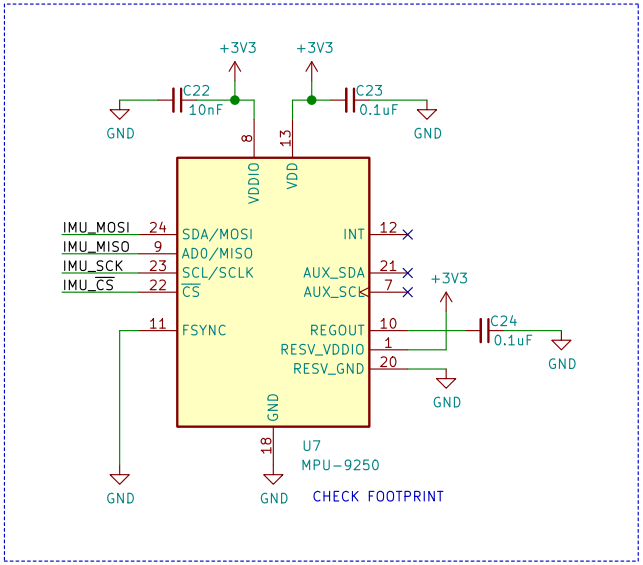
File: servo.sch

Title: Pandora CC2652R Development Board

Size: A4	Date: 2020-02-09	**Rev: A**
KiCad E.D.A. kicad (5.1.5)-2		Id: 4/11

IMU_SCK
IMU_MOSI
IMU_MISO
IMU_CS

IMU



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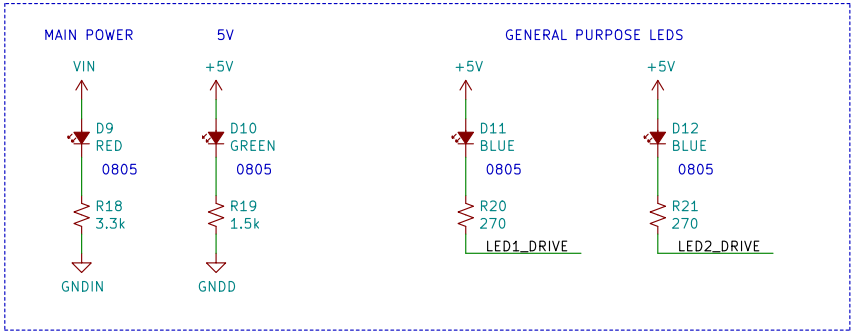
Sheet: /imu/
File: imu.sch

Title: Pandora CC2652R Development Board

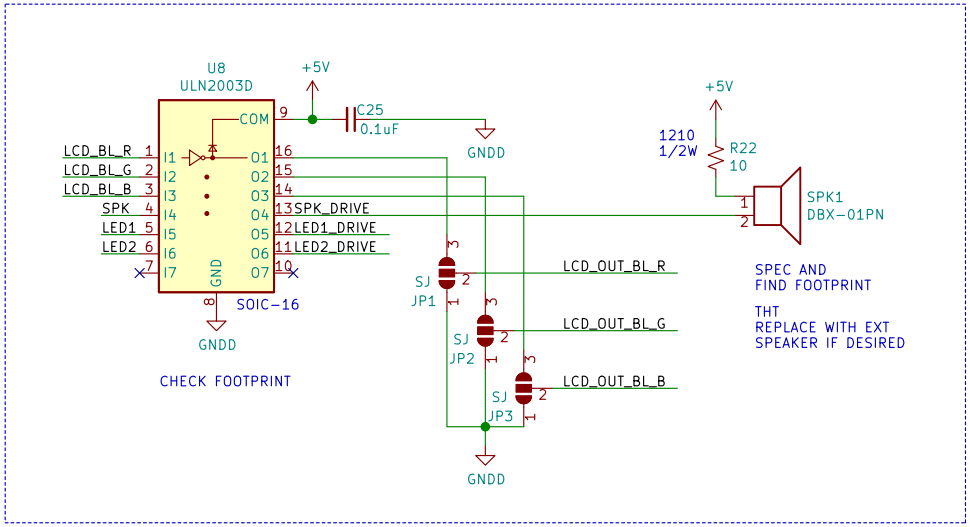
Size: A4	Date: 2020-02-09	**Rev: A**
KiCad E.D.A. kicad (5.1.5)-2		Id: 5/11

LCD_BL_R
LCD_BL_G
LCD_BL_B
LCD_OUT_BL_R
LCD_OUT_BL_G
LCD_OUT_BL_B
LED1
LED2
SPK

INDICATORS



LOW-SIDE DRIVER



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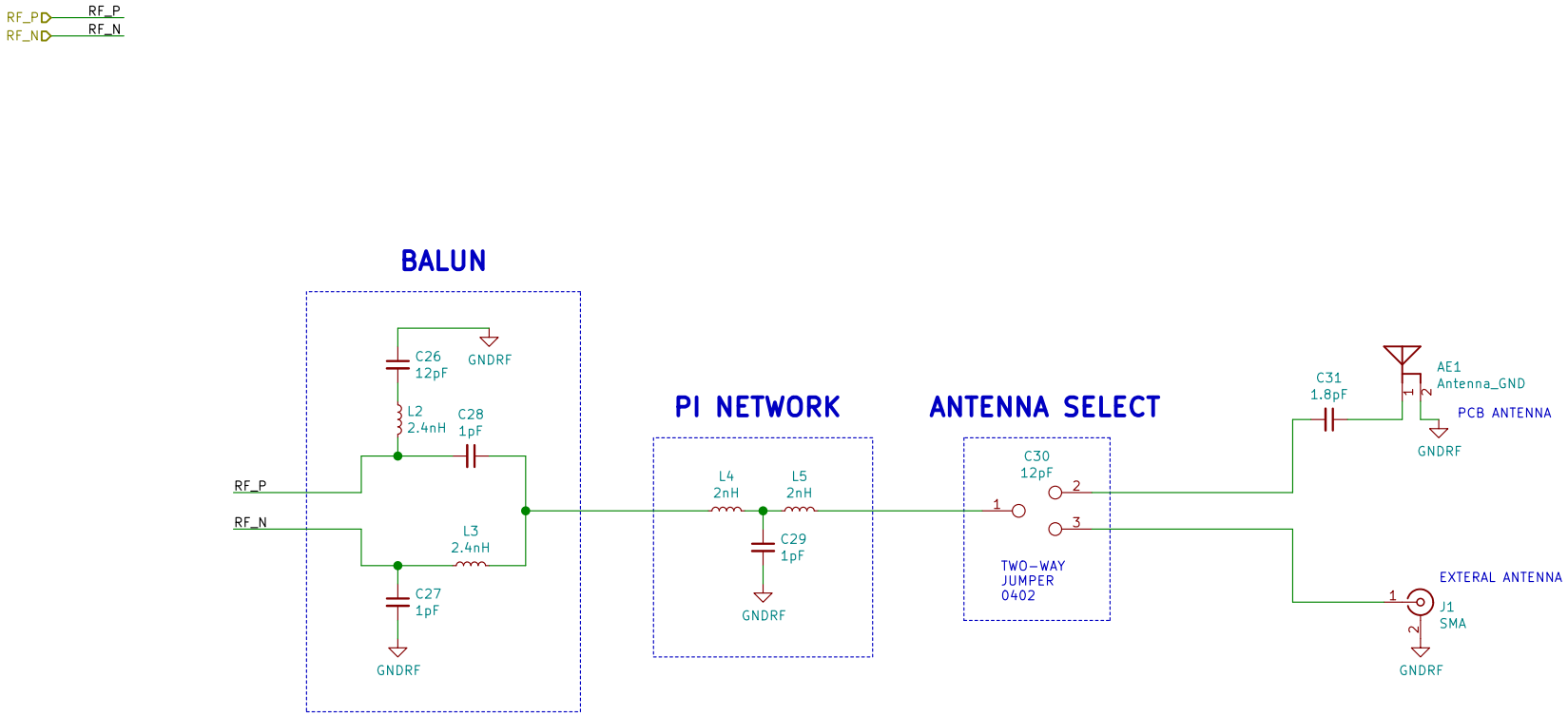
Sheet: /led_speaker/
File: led_speaker.sch

Title: Pandora CC2652R Development Board

Size: A4	Date: 2020-02-09	**Rev: A**
KiCad E.D.A. kicad (5.1.5)-2		Id: 6/11



BASED ON LAUNCHXL-CC26X2R1 DESIGN
MODIFY APPROPRIATELY

ALL PASSIVES 0402 UNLESS OTHERWISE NOTED

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Sheet: /rf/
File: rf.sch

Title: Pandora CC2652R Development Board

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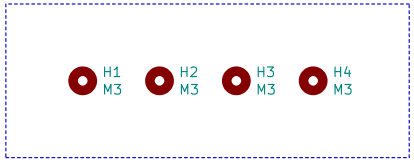
MOUNTING HOLES



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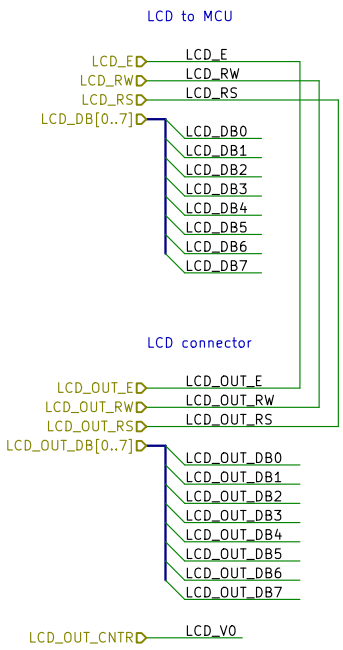
PANDORA

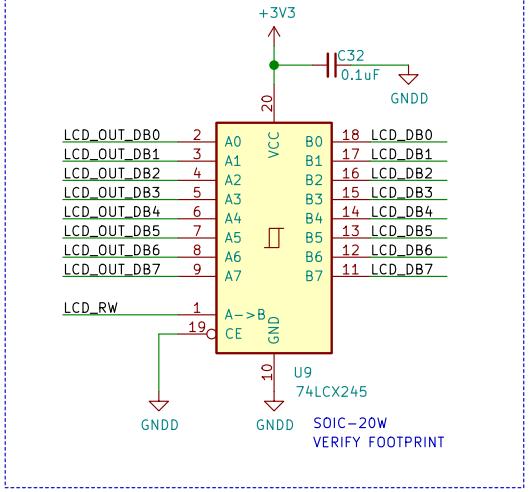
Sheet: /mechanical/
File: mechanical.sch

Title: Pandora CC2652R Development Board

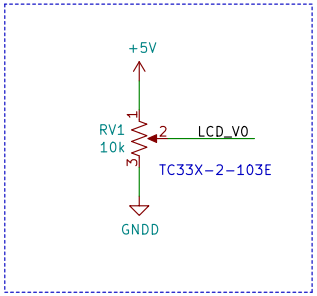
Size: A4	Date: 2020-02-09	**Rev: A**
KiCad E.D.A. kicad (5.1.5)-2		Id: 8/11



LEVEL SHIFTER



CONTRAST ADJUST



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Sheet: /lcd/
File: lcd.sch

Title: Pandora CC2652R Development Board

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KiCad E.D.A. kicad (5.1.5)-2		Id: 9/11

JTAG interface

JTAG_TCK
JTAG_TMS
JTAG_TDO
JTAG_TDI
JTAG_RESET

Radio

RF_P
RF_N

Keypad

KPD_OUT[1..4]
KPD_OUT1
KPD_OUT2
KPD_OUT3
KPD_OUT4

KPD_IN[1..4]
KPD_IN1
KPD_IN2
KPD_IN3
KPD_IN4

LCD

LCD_E
LCD_RW
LCD_RS
LCD_DB[0..7]
LCD_DB0
LCD_DB1
LCD_DB2
LCD_DB3
LCD_DB4
LCD_DB5
LCD_DB6
LCD_DB7

LCD Backlight

LCD_BL_R
LCD_BL_G
LCD_BL_B

Servo

SERVO_PWM
SERVO_AIN

IMU SPI

IMU_SCK
IMU_MOSI
IMU_MISO
IMU_CS

General purpose LED

LED1
LED2

Speaker

SPEAKER
SPK

MICROCONTROLLER

U12
CC2652R

KPD_IN1 5
KPD_IN2 6
KPD_IN3 7
KPD_IN4 8
KPD_OUT1 9
KPD_OUT2 10
KPD_OUT3 11
KPD_OUT4 12
LCD_DB0 14
LCD_DB1 15
LCD_DB2 16
LCD_DB3 17
LCD_DB4 18
LCD_DB5 19
LCD_DB6 20
LCD_DB7 21
TDO LED1 JP4 SJ JTAG_TDO 26
TDI LED2 JP5 SJ JTAG_TDI 27
LCD_RS 28
LCD_RW 29
LCD_E 30
LCD_BL_R 31
LCD_BL_G 32
LCD_BL_B 36
AUXIO26
AUXIO25
AUXIO24
AUXIO23
AUXIO22
AUXIO21
AUXIO20
AUXIO19
SPK 37
IMU_SCK 38
IMU_MOSI 39
IMU_MISO 40
IMU_CS 41
SRV_PWM 42
SRV_AIN 43

DIO_0 DIO_1 DIO_2 DIO_3 DIO_4 DIO_5 DIO_6 DIO_7 DIO_8 DIO_9 DIO_10 DIO_11 DIO_12 DIO_13 DIO_14 DIO_15 DIO_16 DIO_17 DIO_18 DIO_19 DIO_20 DIO_21 DIO_22 DIO_23 DIO_24 DIO_25 DIO_26 DIO_27 DIO_28 DIO_29 DIO_30

VDDS 44
VDDS2 13
VDDS3 22
VDDS_DCDC 34
VDDR 45
VDDR_RF 48
DCOUPL 23
DCDC_SW 33 DCDC_SW
X32K_Q1 3
X32K_Q2 4
X48M_N 46
X48M_P 47
RF_P 1 RF_P
RF_N 2 RF_N
JTAG_TMSC 24 JTAG_TMS
JTAG_TCKC 25 JTAG_TCK
RESET_N 35 RESET
EGP 49

VMCU
VMCUA
GNDD

C35 0.1uF
C40 0.1uF
C36 0.1uF
C41 0.1uF
C37 22uF
C42 0.1uF
C38 0.1uF
C39 1uF
1206

ANALOG POWER

L6
6.8uH
0603
DCDC_SW
VMCUA
C47
22uF
1206

Y1
32.768kHz
NEED FOOTPRINT
C43 12pF
C44 12pF
C45 13pF
C46 13pF
CHECK LOAD CAPS

Y2
FA-238_48M
CHECK FOOTPRINT

RESET

SW18
PTS 647 SK38 SMTR2 LFS
4.5mm SMT
BLACK CAP

U10
ADM811ZARTZ
MR GND VCC RESET

C33 0.1uF
C34 0.1uF

R24 10k
R23 100k
JTAG_RESET

U11
74LVC1G08
RESET

2.32V RESET THRESH

PULLDOWN ENSURES
VALID RESET DOWN TO 0V

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PANDORA

Sheet: /mcu/
File: mcu.sch

Title: Pandora CC2652R Development Board

Size: A4	Date: 2020-02-09	**Rev: A**
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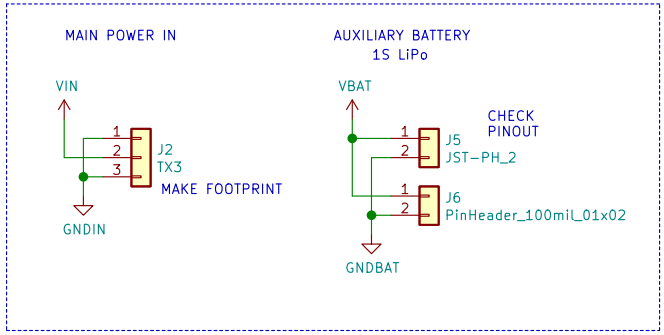
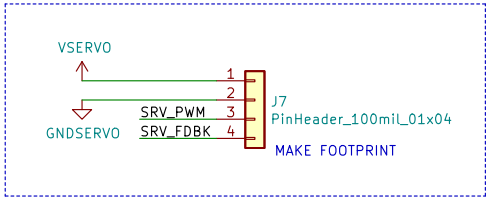
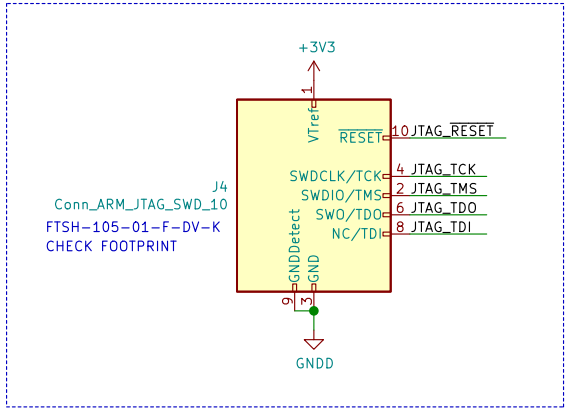
POWER



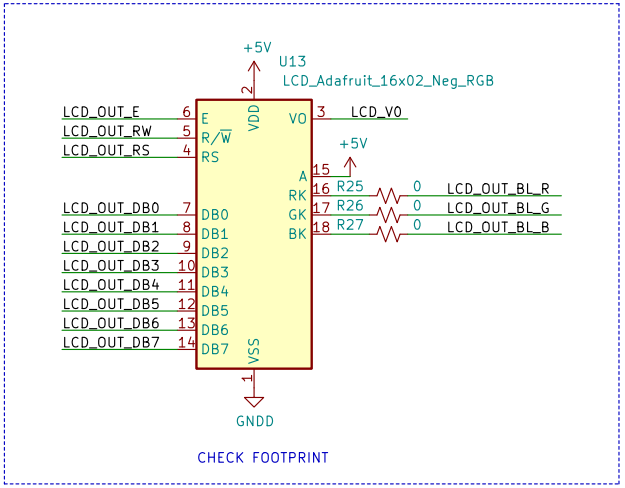
SERVO



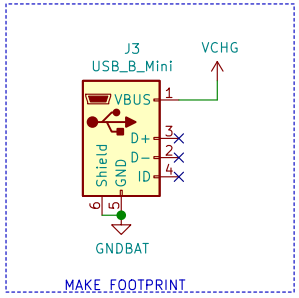
JTAG



LCD



AUXILIARY BATTERY CHARGE



JTAG_TCK
JTAG_TMS
JTAG_TDO
JTAG_TDI
JTAG_RESET

LCD_OUT_E
LCD_OUT_RW
LCD_OUT_RS
LCD_OUT_DB[0..7]
LCD_OUT_DB0
LCD_OUT_DB1
LCD_OUT_DB2
LCD_OUT_DB3
LCD_OUT_DB4
LCD_OUT_DB5
LCD_OUT_DB6
LCD_OUT_DB7

LCD_OUT_CNTR
LCD_VO

LCD_OUT_BL_R
LCD_OUT_BL_G
LCD_OUT_BL_B

SERVO_PWM
SERVO_FDBK

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Sheet: /connectors/
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