PWM

CONN_01X04

P1

PWM_R PWM_B PWM_G PWM_OLED

LED

CONN_01X04

P3

LED_GND LED_B LED_G LED_R

Sheet: Bucket Converters

V20 5V_EN

V5 V28 DM1 D- DP1 D+

File: bucketConvs.sch

SCREEN

CONN_01X03

GND

P6

VOLED

PWR_FLAG: No driver needed (done by ext. device).

CON1

BARREL_JACK

PWR_FLAG

V20

Debugging Diode

Diode: 1.7 V, 2 mA
P=33.489 mW
Can be left out in a later version!

D1 LED

R1 10k

PWR_FLAG

GND

Sheet: LEDs

V20

PWM_R PWM_B PWM_G PWM_OLED

ADC_R ADC_B ADC_G ADC_OLED VOLED LED_R LED_B LED_G LED_GND

File: leds.sch

V5 D- D+

VCC D- D+ GND shield USB_A

P4

GND

ADC_OLED ADC_G ADC_B ADC_R

P2

CONN_01X04

ADC

Sheet: Measuring Points for Probes

ADC_OLED ADC_R ADC_B ADC_G PWM_OLED PWM_R PWM_B PWM_G

File: measurePoints.sch

GND

5V_EN V28

P5

CONN_01X03

Power for µC

Project: Swakeup

Uppsala University

Sheet: /

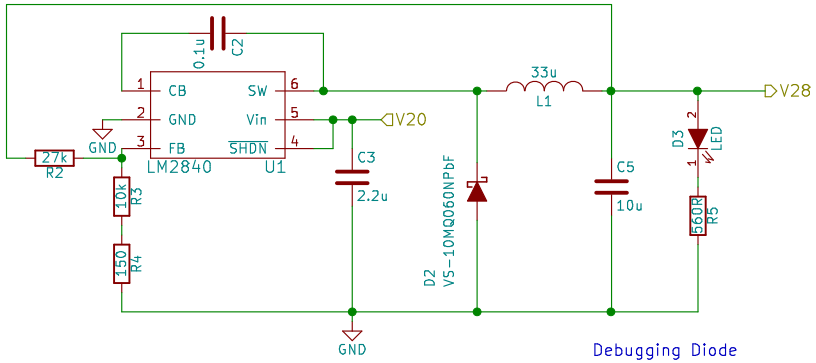
File: power.sch

Title: Power Board

Size: A4	Date: 2017-03-09	**Rev: 2.0**
KiCad E.D.A. kicad 4.0.2+dfsg1-stable		Id: 1/5

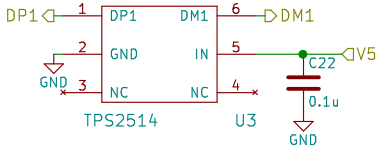
2.8 V for µC

Vout=0.765 V (1 + (27k/ 10.15k))=2.8 V
27k/10.15k= 2.66



Debugging Diode

Diode: 1.7 V, 2 mA
P=2.161 mW
Can be left out in a later version!

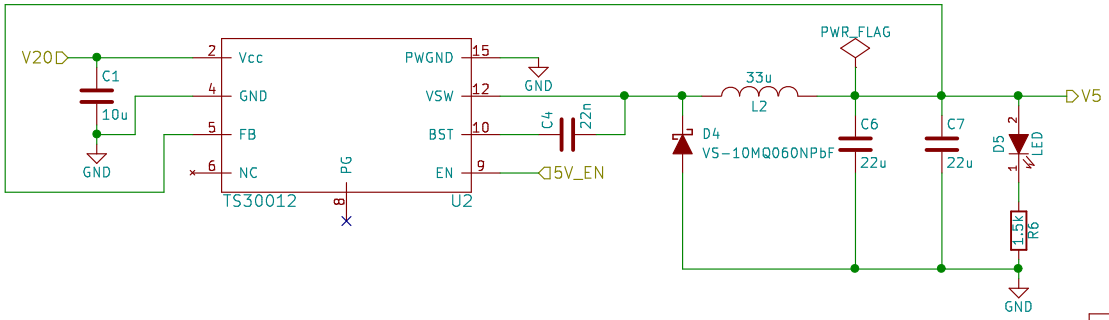


USB Dedicated Charging Port Control.

Simple SOT-23-6 IC for detecting propriatary and open standards used by a device and providing the corresponding electrical signature at the data lines (voltage or impedance).

5V for Mobile Phone

Vout,max=5 V
Aout,max = 2A



Debugging Diode

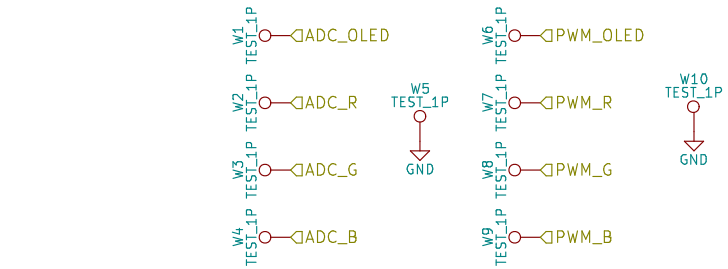
Diode: 1.7 V, 2 mA
P=7.26 mW
Can be left out in a later version!

Uppsala University

Sheet: /Bucket Converters/
File: bucketConvs.sch

Title: Bucket Converters for 5 V and 2.8 V

Size: A4	Date: 2017-03-09	**Rev: 2.0**
KiCad E.D.A. kicad 4.0.2+dfsg1-stable		Id: 2/5



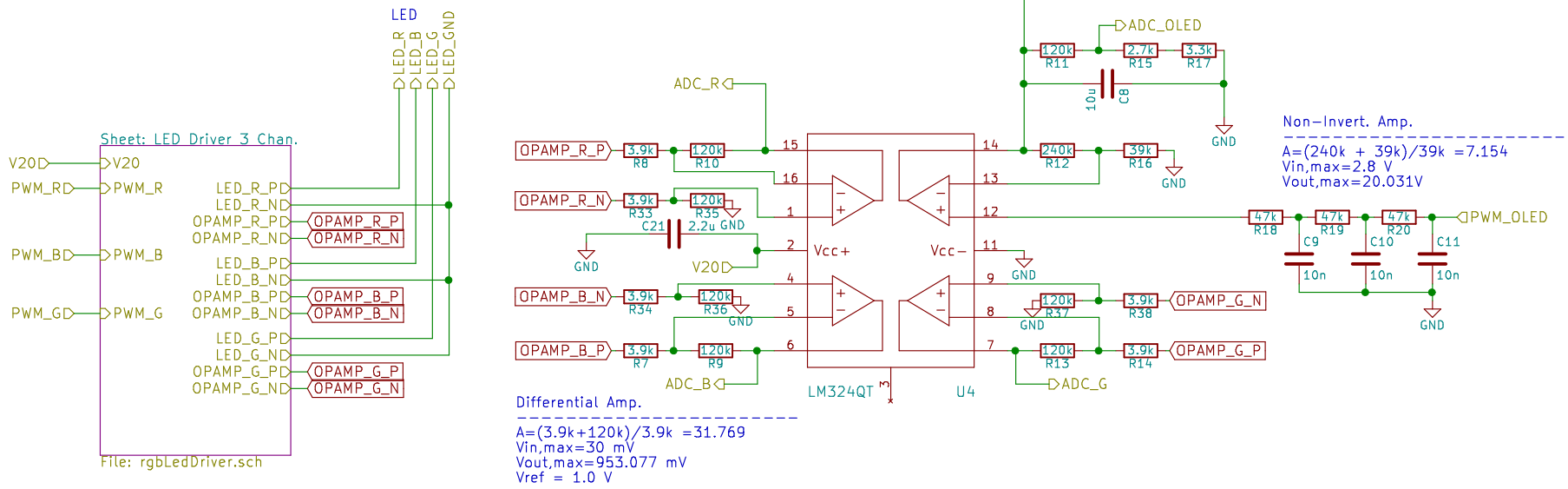
Test Points for the FBs.
Can be left out in a later version!

Test Points for the PWM signals.
Can be left out in a later version!

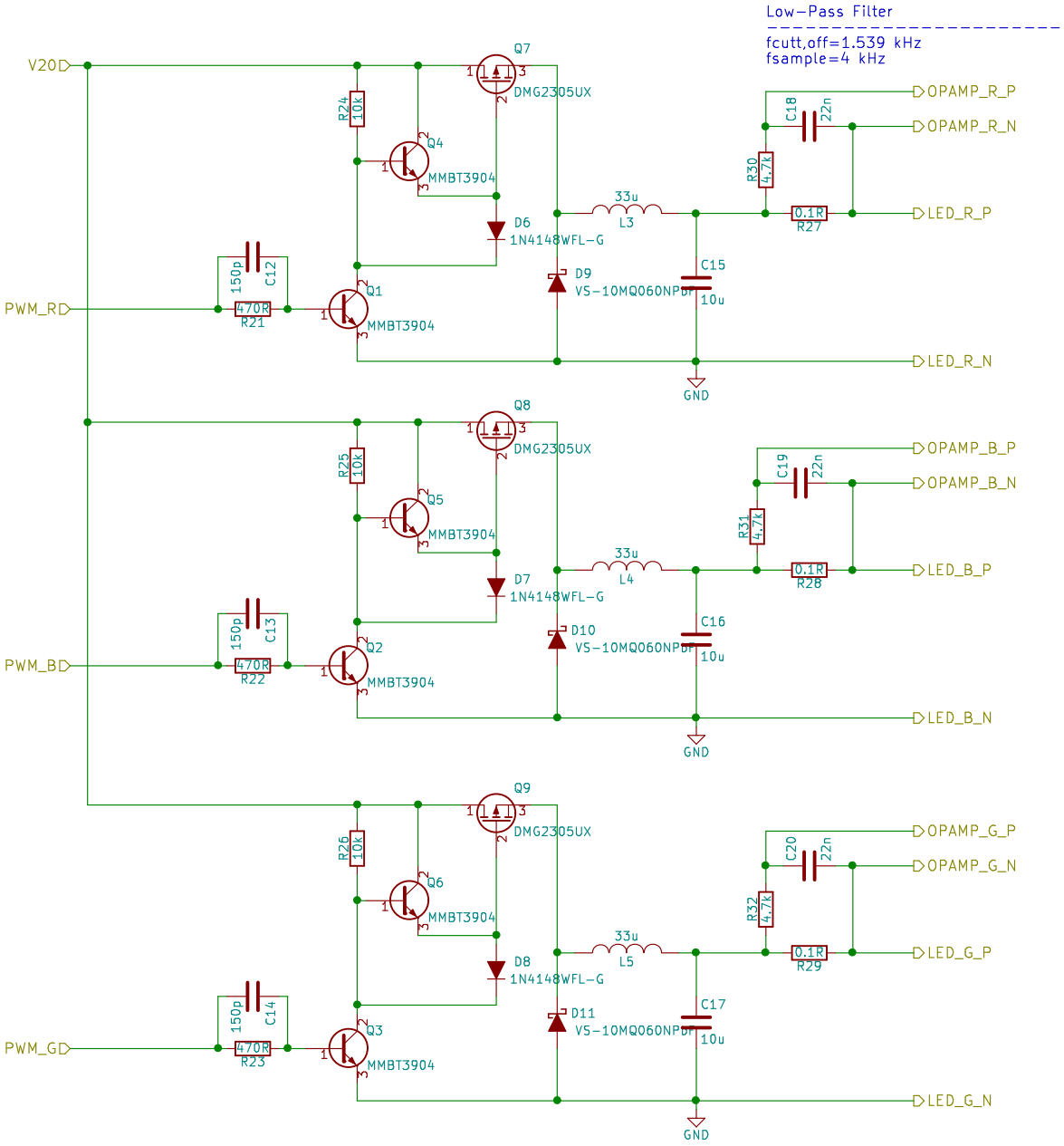
Project: Swakeup
Uppsala University
Sheet: /Measuring Points for Probes/
File: measurePoints.sch

Title: Test Points

Size: A4	Date: 2017-03-09	**Rev: 2.0**
KiCad E.D.A. kicad 4.0.2+dfsg1-stable		Id: 3/5



Project: SwakeUp		
Uppsala University		
Sheet: /LEDs/ File: leds.sch		
Title: LEDs		
Size: A4	Date: 2017−03−09	**Rev: 2.0**
KiCad E.D.A. kicad 4.0.2+dfsg1−stable		Id: 4/5



Project: Swakeup
Uppsala University
Sheet: /LEDs/LED Driver 3 Chan. /
File: rgbLedDriver.sch

Title: RGB LED Driver

Size: A4	Date: 2017-03-09	**Rev: 2.0**
KiCad E.D.A. kicad 4.0.2+dfsg1-stable		Id: 5/5