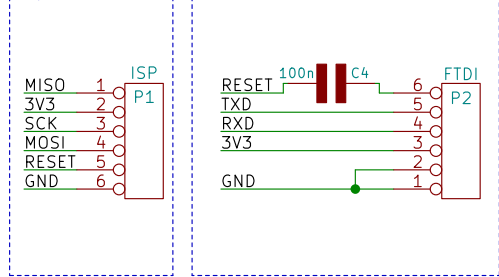


ISP/PROG. Header



Mounting Holes



LED\_brd



6x LED, 2.2V @ 20mA, 5mm, 9000mcd  
(1x Blink, 4x PWM, 1x Digital)  
+ 1x Charge LED

LED\_brd.sch

WyoLum

Sheet: /

File: bebl\_v2.sch

Title: BEBL\_v2 (bar end brake light)

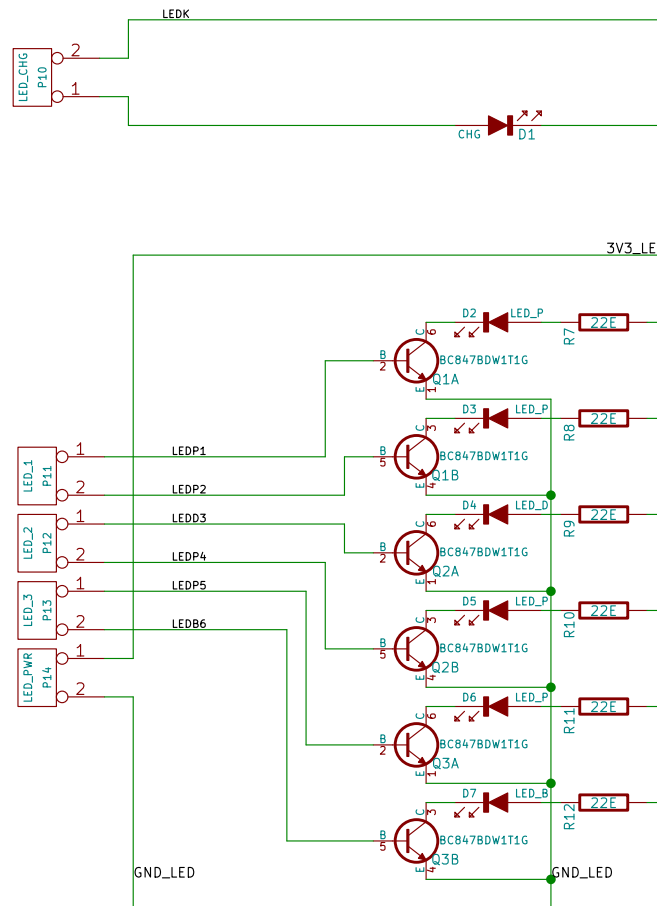
Size: A4

Date: 2 may 2012

KiCad E.D.A. kicad 0.201503050816+547822ubuntu14.10.1-product

Rev: 1

Id: 1/2



LED\_B = Blink  
LED\_P = PWM  
LED\_D = Digital

LED Resistor  
 $3V3(Supply) - 2V2(LED) - 0.7(transistor) = 0.4V$   
 $R_{led} = 0.4V / 20mA = 20\text{ Ohm}$   
 rounded to 22 Ohm

Sheet: /LED\_brd/  
File: LED\_brd.sch

**Title:**

Size: A4

Date:

Rev:

KiCad E.D.A. kicad 0.201503050816+547822ubuntu14.10.1-product

Id: 2/2