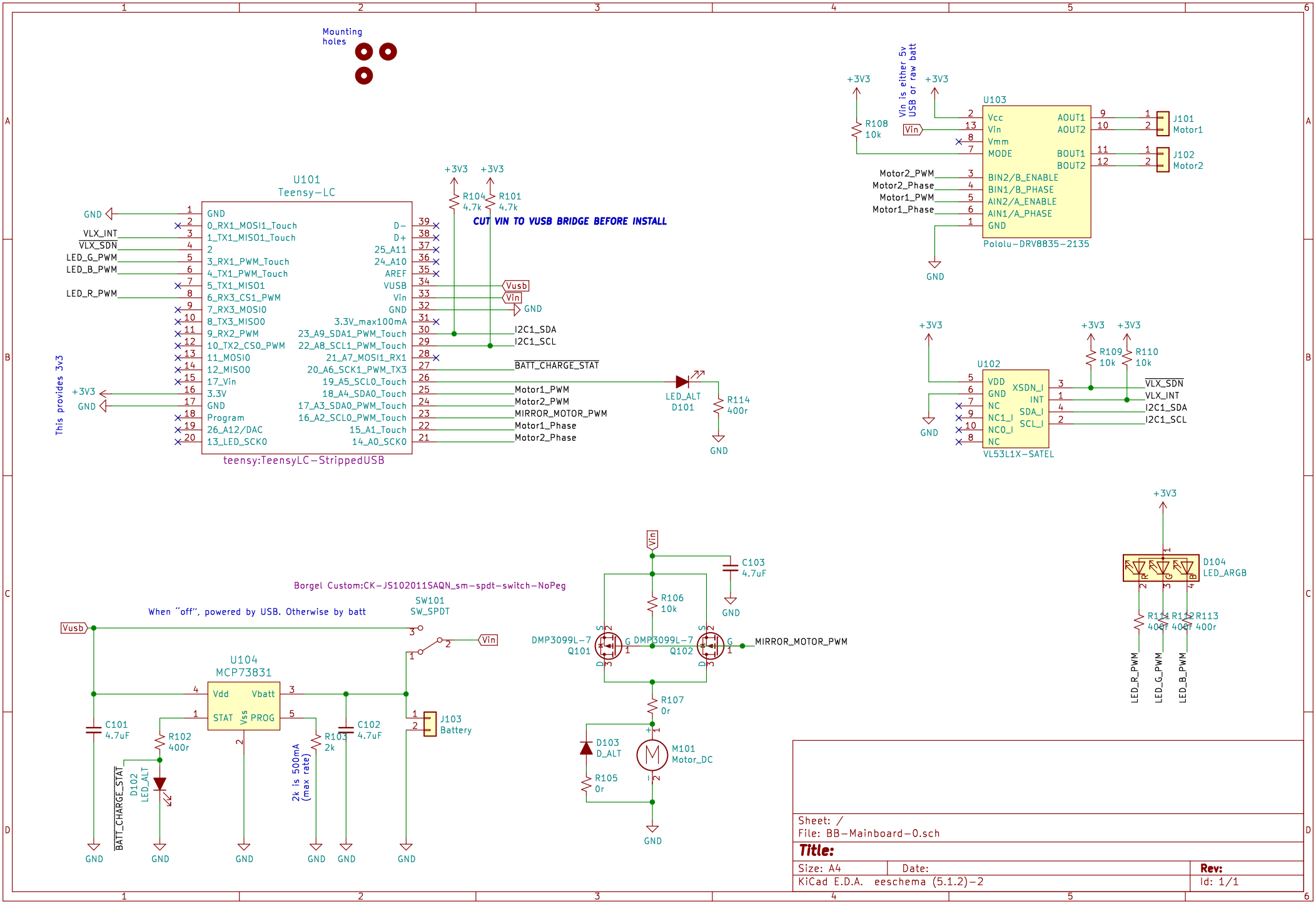
Mounting holes
U101
Teensy-LC
teensy:TeensyLC-StrippedUSB
CUT VIN TO VUSB BRIDGE BEFORE INSTALL
This provides 3v3
GND
VLX_INT
VLX_SDN
LED_G_PWM
LED_B_PWM
LED_R_PWM
+3V3
0_RX1_MISO1_Touch
1_TX1_MISO1_Touch
3_RX1_PWM_Touch
4_TX1_PWM_Touch
5_TX1_MISO1
6_RX3_CS1_PWM
7_RX3_MOSI0
8_TX3_MISO0
9_RX2_PWM
10_TX2_CS0_PWM
11_MOSI0
12_MISO0
17_Vin
3.3V
Program
26_A12/DAC
13_LED_SCK0
D-
D+
25_A11
24_A10
AREF
VUSB
Vin
3.3V_max100mA
23_A9_SDA1_PWM_Touch
22_A8_SCL1_PWM_Touch
21_A7_MOSI1_RX1
20_A6_SCK1_PWM_TX3
19_A5_SCL0_Touch
18_A4_SDA0_Touch
17_A3_SDA0_PWM_Touch
16_A2_SCL0_PWM_Touch
15_A1_Touch
14_A0_SCK0
Vusb
I2C1_SDA
I2C1_SCL
BATT_CHARGE_STAT
Motor1_PWM
Motor2_PWM
MIRROR_MOTOR_PWM
Motor1_Phase
Motor2_Phase
R104 4.7k
R101 4.7k
LED_ALT D101
R114 400r
U103
Pololu-DRV8835-2135
Vcc
Vin
Vmm
MODE
BIN2/B_ENABLE
BIN1/B_PHASE
AIN2/A_ENABLE
AIN1/A_PHASE
AOUT1
AOUT2
BOUT1
BOUT2
Vin is either 5v USB or raw batt
R108 10k
J101 Motor1
J102 Motor2
U102
VL53L1X-SATEL
VDD
XSDN_I
INT
SDA_I
SCL_I
NC1_I
NC0_I
R109 10k
R110 10k
Borgel Custom:CK-JS102011SAQN_sm-spdt-switch-NoPeg
SW101
SW_SPDT
When "off", powered by USB. Otherwise by batt
U104
MCP73831
Vdd
Vbatt
STAT
Vss
PROG
C101 4.7uF
R102 400r
D102 LED_ALT
R103 2k
2k is 500mA (max rate)
C102 4.7uF
J103 Battery
C103 4.7uF
R106 10k
DMP3099L-7
Q101
Q102
R107 0r
D103 D_ALT
R105 0r
M101 Motor_DC
D104 LED_ARGB
R111 400r
R112 400r
R113 400r
Sheet: /
File: BB-Mainboard-0.sch
Title:
Size: A4
Date:
Rev:
KiCad E.D.A. eeschema (5.1.2)-2
Id: 1/1