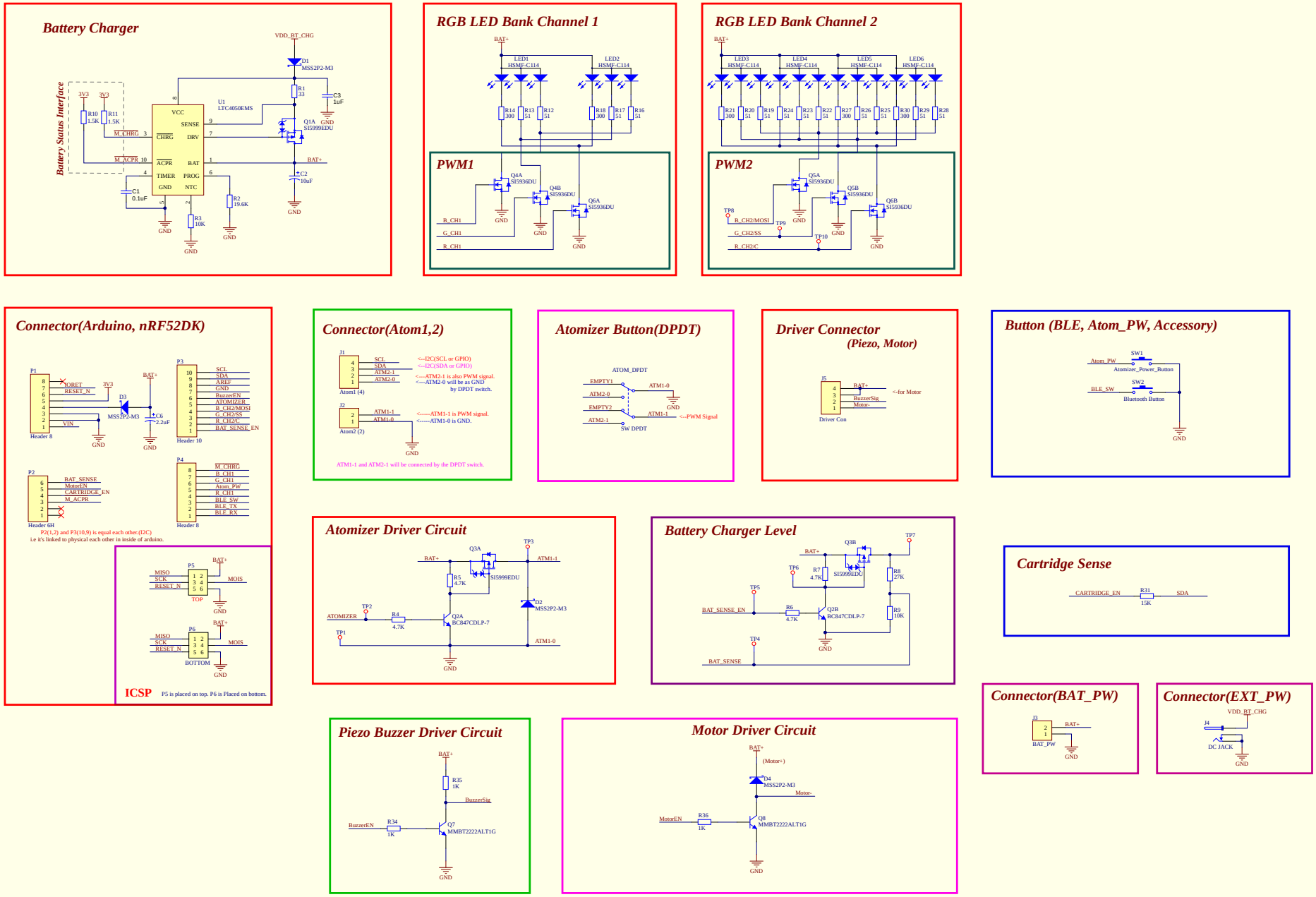
Battery Charger
Battery Status Interface
VDD_BT_CHG
D1 MSS2P2-M3
R1 33
C3 1uF
U1 LTC4050EMS
VCC
SENSE
CHRG
DRV
ACPR
BAT
TIMER
PROG
GND
NTC
Q1A SI5999EDU
BAT+
C2 10uF
R2 19.6K
R3 10K
C1 0.1uF
R10 1.5K
R11 1.5K
3V3
M_CHRG
M_ACPR
GND
RGB LED Bank Channel 1
LED1 HSMF-C114
LED2 HSMF-C114
R14 300
R13 51
R12 51
R18 300
R17 51
R16 51
PWM1
Q4A SI5936DU
Q4B SI5936DU
Q6A SI5936DU
B_CH1
G_CH1
R_CH1
RGB LED Bank Channel 2
LED3 HSMF-C114
LED4 HSMF-C114
LED5 HSMF-C114
LED6 HSMF-C114
R21 300
R20 51
R19 51
R24 51
R23 51
R22 51
R27 300
R26 51
R25 51
R30 300
R29 51
R28 51
PWM2
Q5A SI5936DU
Q5B SI5936DU
Q6B SI5936DU
TP8
B_CH2/MOSI
TP9
G_CH2/SS
TP10
R_CH2/C
Connector(Arduino, nRF52DK)
P1
Header 8
IORET
RESET_N
VIN
D3 MSS2P2-M3
C6 2.2uF
P3
Header 10
SCL
SDA
AREF
GND
BuzzerEN
ATOMIZER
B_CH2/MOSI
G_CH2/SS
R_CH2/C
BAT_SENSE_EN
P2
Header 6H
BAT_SENSE
MotorEN
CARTRIDGE_EN
M_ACPR
P4
Header 8
M_CHRG
B_CH1
G_CH1
Atom_PW
R_CH1
BLE_SW
BLE_TX
BLE_RX
P2(1,2) and P3(10,9) is equal each other.(I2C)
i.e it's linked to physical each other in inside of arduino.
P5
MISO
SCK
RESET_N
MOIS
TOP
P6
BOTTOM
ICSP
P5 is placed on top. P6 is Placed on bottom.
Connector(Atom1,2)
J1
Atom1 (4)
<--I2C(SCL or GPIO)
<--I2C(SDA or GPIE3)
<----ATM2-1 is also PWM signal.
<----ATM2-0 will be as GND by DPDT switch.
J2
Atom2 (2)
ATM1-1
ATM1-0
<------ATM1-1 is PWM signal.
<------ATM1-0 is GND.
ATM1-1 and ATM2-1 will be connected by the DPDT switch.
Atomizer Button(DPDT)
ATOM_DPDT
EMPTY1
ATM2-0
EMPTY2
ATM2-1
SW DPDT
<--PWM Signal
Driver Connector
(Piezo, Motor)
J5
Driver Con
BuzzerSig
Motor-
<-for Motor
Button (BLE, Atom_PW, Accessory)
SW1
Atomizer_Power_Button
SW2
Bluetooth Button
Atomizer Driver Circuit
Q3A SI5999EDU
TP3
R5 4.7K
D2 MSS2P2-M3
TP2
ATOMIZER
R4 4.7K
Q2A BC847CDLP-7
TP1
Battery Charger Level
Q3B SI5999EDU
TP7
TP6
R7 4.7K
R8 27K
TP5
BAT_SENSE_EN
R6 4.7K
Q2B BC847CDLP-7
R9 10K
TP4
BAT_SENSE
Cartridge Sense
CARTRIDGE_EN
R31 15K
SDA
Piezo Buzzer Driver Circuit
R35 1K
BuzzerSig
BuzzerEN
R34 1K
Q7 MMBT2222ALT1G
Motor Driver Circuit
(Motor+)
D4 MSS2P2-M3
Motor-
MotorEN
R36 1K
Q8 MMBT2222ALT1G
Connector(BAT_PW)
J3
BAT_PW
Connector(EXT_PW)
J4
DC JACK
Title
Vapeix Shield 1.0.1
Size
A2
Project Number
1
Revision
1.0.1
Date: 4/26/2016
Sheet 1 of 1
File:
Drawn by : Anne Moller
VAPEiX POWERED