Charging&LDO&3VDC-5VDC

C19 10uF
U2 TP5410
+5V
D5 SS32
D4 SS32
C7 0.1uF
C5 22uF
VCC
5 VCC VOUT 1
2 CHRG# LX 8
RED
GREEN
4 STDBY#
3 PROG BAT 6
R16 680R
L1 4.7uH
VBAT
C8 0.1uF
C6 22uF
GND
U4 PAD
NTC_VDD
C9 22uF
SensorVDD
GND

NTC_temperature

NTC_VDD
R13 610k
R14 1k
NTC
U3 XC6228D302VR-G
4 NC
CE 2
VOUT 5 VSS / VIN
R24 10k
NTC ZH1.5-2P-WT
GND
LDO
C10 22uF
VBAT
1N5819FL D7
C11 22uF
C1 22uF
GND

BATTERY ZH1.5-2P-WT
VBAT
GND

Pwoer_Switch

SwONOFF
R11 51k
Q4 AO3401
R12 51k
R18 10k
Pwoer_Switch
Q9 SS8050
R17 200k
SwONOFF
Q8 AO3401
GND
R10 51k
Q11 AO3401
SwONOFF

Valve

Valve
R20 10k
R22 51k
BAT
Q5 AO3401
BAT
D6 1N4148WS T4
VALVE ZH1.5-2P-WT
GND

Pressure&NTC Driver

Q7 SS8550
U5 HX711
VCC
1 VSUP DVDD 16
2 BASE RATE 15
3 AVDD XI 14
4 VFB XO 13
5 AGND DOUT 12 DOUT
6 VBG PD_SCK 11 D_SCK
7 INNA INPB 10
8 INPA INNB 9 NTC
SensorGND
C3 1u
NTC_VDD
C2 0.1u
R8 1k SensorOUT+
R7 1k SensorOUT-
GND
GND
R9 5.6k
R21 610k
R23 10k
NTC
GND

Pressure Sensor

SENSORGND RCSCTE
SENSORGND1 RCSCTE SENSORGND
SENSOROUT+ RCSCTE
SENSOROUT+1 RCSCTE SENSOROUT+
SENSORVDD RCSCTE
SENSORVDD1 RCSCTE SENSORVDD
VBAT

GND RCSCTE
GND1 RCSCTE
SensorOUT-
SENSOROUT- RCSCTE
SENSOROUT-1 RCSCTE
NC RCSCTE
NC1 RCSCTE
GND

U7 H8118A50M5R

L2 47uH
BAT
U10 PAD
VibrationVDD
1 LX EN
VOUT 4 GND / NC
C4 22uF
GND

Pump

U9 PAD
BAT
R5 51k
Q3 AO3401
Pump_motor
R6 10k
Q10 SS8050
R19 200k
D3 1N4148WS T4
PUMP ZH1.5-2P-WT
GND

Vibration

VibrationVDD
R2 51k
Q1 AO3401
Vibration_motor
R1 10k
Q12 SS8050
R26 200k
D1 1N4148WS T4
VIBRATION ZH1.5-2P-WT
GND

PTC

BAT
U8 PAD
R3 51k
Q2 AO3401
PTC
R4 10k
Q6 SS8050
R15 200k
D2 1N4148WS T4
PTC3 ZH1.5-2P-WT
GND

U1 STC15W205S

16 P1.1
15 DIO RSTOUT_LOW/P1.0
14 PTC_Button Txd_2/INT3/P3.7
13 Vibration_button Rxd_2/INT2/P3.6
12 Pump_button INT1/P3.3
11 Power_button INT0/P3.2
10 Valve T2/TxD/P3.1
9 Vibration_motor T2CLKO/INT4/RxD/P3.0
CLK
P1.2/T0/CMPO 1 STB
P1.3 2 DOUT
P.14/T0CLKO 3 D_SCK
P1.5 4 Pwoer_Switch
P5.4/RST/MCLKO/CMP- 5 Pump_motor
VCC 6 LDO
P5.5/CMP+ 7 PTC
GND 8
GND

ISP Programmer

ISP A1501WR-4P
LDO
1
Valve 2
Vibration_motor 3
4
GND

Button_connector & LED_connector & Charging_connector

KEY_BOARD_CONNECTOR
+5V
1 2 Power_button
RED 3 4 Vibration_button
GREEN 5 6 Pump_button
7 8 PTC_Button
9 10 DIO
11 12 CLK
13 14 STB
15 16
17 18
19 20
R25 100R BAT
GND
X1321WR-2X10J-C40D18 COPY

TITLE:
Cupping_Project
REV: 1.1
Company: YIJia_Kitchen & Bath
Cupping
Sheet: 1/1
Date: 2021-09-06
Drawn By: Joel Deng

2021-07-13
Change LDO_xc6228 CE_input
Update Button_connector 1.5mm to 1.25mm
Update LED_connector 1.5mm to 1.25mm

2021-07-19
Add Pressure Sensor & HX711 Driver
Change LED Driver that IO drives to GN1616 drives
Add Charging_connector for Type_C

2021-07-20
Delete Buzzer-----Add Power Switch PMOS
PTC Port:Add SS8050 NPN to drives MOSFET_AO3401

2021-07-21
Change LED+Button+Charing FPC connector to 1.27mm 2*10 header
Open the HX711 changle A that add NTC temperature

2021-08-4
Update connector-20-pin
Add H8118A50M5R DC-DC(3V-5V) PFM boost drivers Pump_Motor

2021-08-16
Fix temperature bug;
Change pump & ptc to DC3V
Change Vibration to DC5V
Add SS8050 pull down resistor
Move control 2 control lines
Redo layout

2021-08-30
Add ss8050 to drives Vibration_motor
Change the hx711 power supply 3V to 5V
Change the hx711 channel_NTC input resistors

2021-08-31
Add 100R load_resistor to gn1616 driver
Add Schottky Diode & Capacitor to mcu power supply

2021-09-06
Update stc204s to stc205s