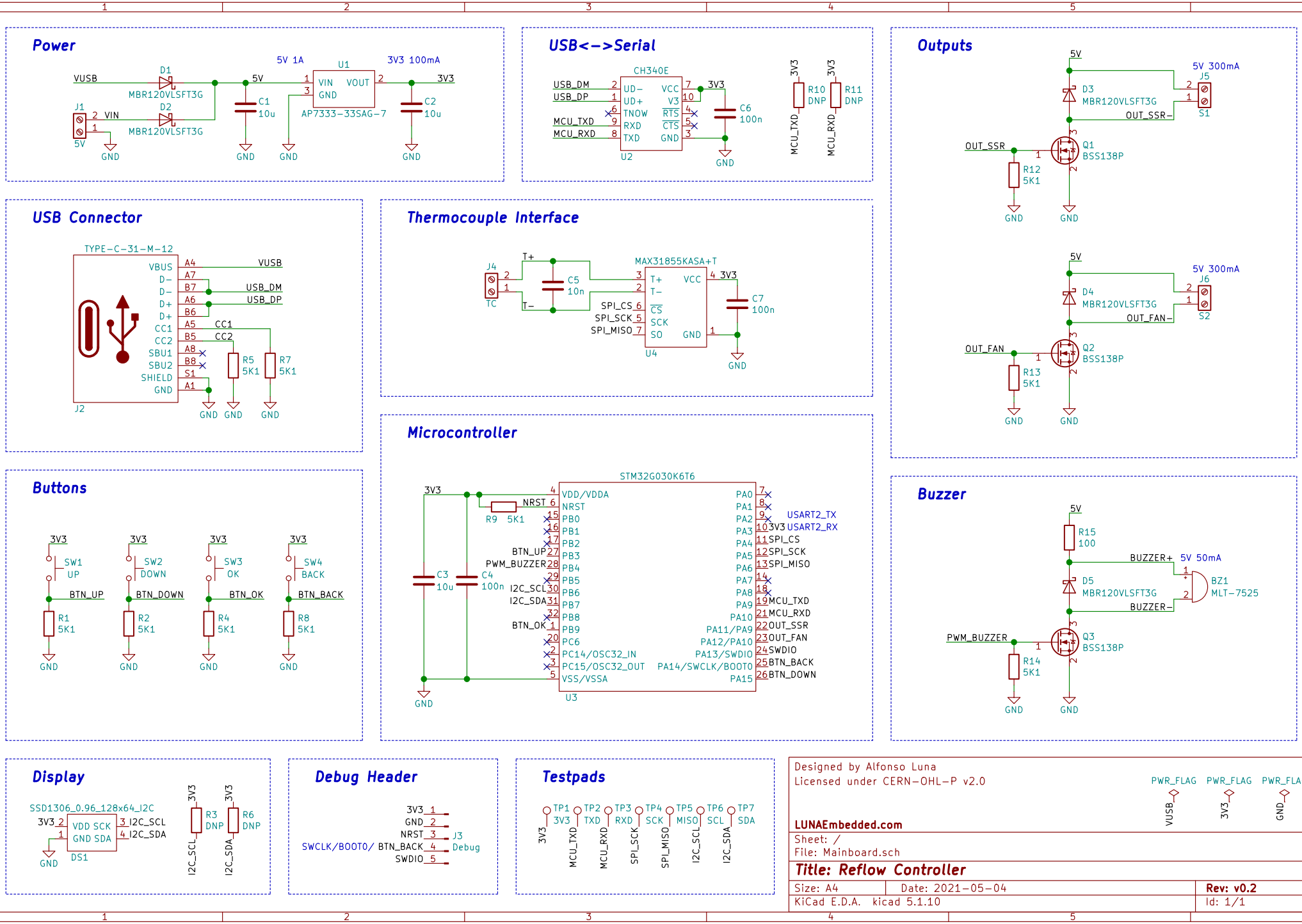
Power
VUSB
D1
MBR120VLSFT3G
J1
VIN
5V
D2
MBR120VLSFT3G
GND
5V
C1
10u
5V 1A
U1
VIN
VOUT
GND
AP7333-33SAG-7
3V3 100mA
3V3
C2
10u
USB<->Serial
CH340E
USB_DM
USB_DP
MCU_TXD
MCU_RXD
UD-
UD+
TNOW
RXD
TXD
VCC
V3
RTS
CTS
GND
U2
C6
100n
R10
DNP
R11
DNP
Outputs
5V
5V 300mA
J5
D3
MBR120VLSFT3G
OUT_SSR-
S1
OUT_SSR
Q1
BSS138P
R12
5K1
J6
D4
MBR120VLSFT3G
OUT_FAN-
S2
OUT_FAN
Q2
BSS138P
R13
5K1
USB Connector
TYPE-C-31-M-12
VBUS
D-
D+
CC1
CC2
SBU1
SBU2
SHIELD
GND
J2
R5
5K1
R7
5K1
Thermocouple Interface
J4
TC
T+
T-
C5
10n
MAX31855KASA+T
SPI_CS
SPI_SCK
SPI_MISO
U4
C7
100n
Microcontroller
STM32G030K6T6
3V3
NRST
R9
5K1
C3
10u
C4
100n
BTN_UP
PWM_BUZZER
I2C_SCL
I2C_SDA
BTN_OK
U3
USART2_TX
USART2_RX
SPI_CS
SPI_SCK
SPI_MISO
MCU_TXD
MCU_RXD
OUT_SSR
OUT_FAN
SWDIO
BTN_BACK
BTN_DOWN
Buzzer
R15
100
BUZZER+
5V 50mA
BZ1
MLT-7525
BUZZER-
D5
MBR120VLSFT3G
PWM_BUZZER
Q3
BSS138P
R14
5K1
Buttons
SW1
UP
BTN_UP
R1
5K1
SW2
DOWN
BTN_DOWN
R2
5K1
SW3
OK
BTN_OK
R4
5K1
SW4
BACK
BTN_BACK
R8
5K1
Display
SSD1306_0.96_128x64_I2C
VDD SCK
GND SDA
DS1
I2C_SCL
I2C_SDA
R3
DNP
R6
DNP
Debug Header
3V3
GND
NRST
SWCLK/BOOT0/
BTN_BACK
SWDIO
J3
Debug
Testpads
TP1
TP2
TP3
TP4
TP5
TP6
TP7
3V3
TXD
RXD
SCK
MISO
SCL
SDA
PWR_FLAG
VUSB
3V3
GND
Designed by Alfonso Luna
Licensed under CERN-OHL-P v2.0
LUNAEmbedded.com
Sheet: /
File: Mainboard.sch
Title: Reflow Controller
Size: A4
Date: 2021-05-04
Rev: v0.2
KiCad E.D.A. kicad 5.1.10
Id: 1/1