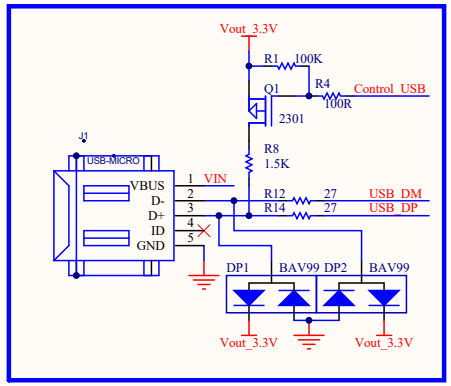
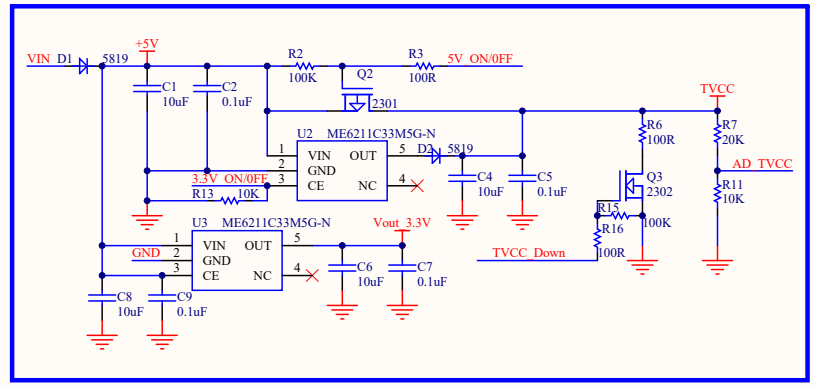
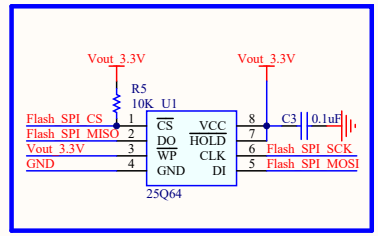
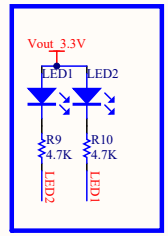
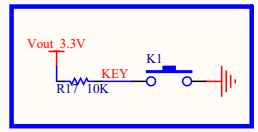
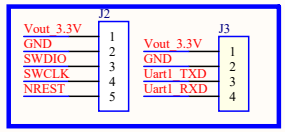

Vout_3.3V
R1 100K
Q1
R4 100R
Control_USB
2301
R8 1.5K
J1
USB-MICRO
VBUS
D-
D+
ID
GND
1 VIN
R12 27 USB_DM
R14 27 USB_DP
DP1 BAV99 DP2 BAV99
Vout_3.3V
Vout_3.3V

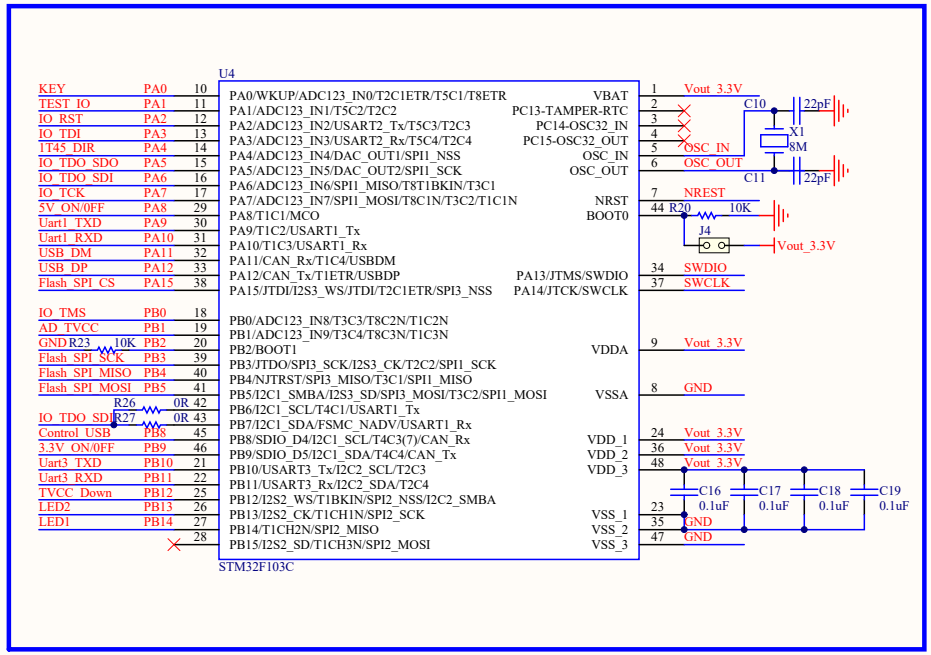

VIN_D1 5819
+5V
C1 10uF
C2 0.1uF
R2 100K
Q2
R3 100R
5V_ON/0FF
2301
TVCC
U2 ME6211C33M5G-N
VIN OUT
GND
CE NC
D2 5819
3.3V_ON/0FF
R13 10K
C4 10uF
C5 0.1uF
R6 100R
R7 20K
Q3 2302
R15
R16 100K
100R
R11 10K
AD_TVCC
TVCC_Down
U3 ME6211C33M5G-N
Vout_3.3V
C6 10uF
C7 0.1uF
C8 10uF
C9 0.1uF

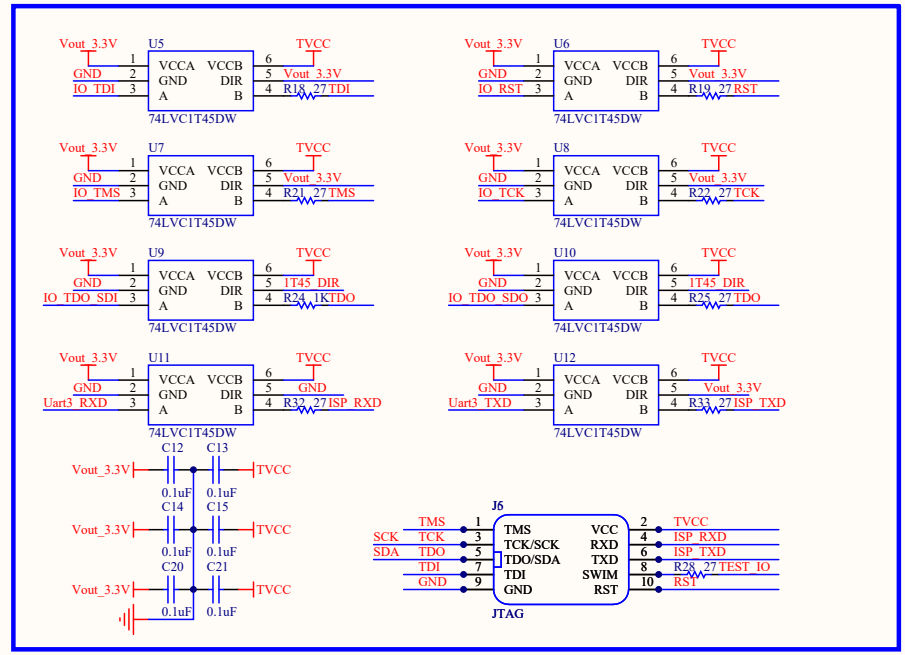

Vout_3.3V
Vout_3.3V
R5 10K U1
Flash_SPI_CS
Flash_SPI_MISO
Vout_3.3V
GND
CS VCC
DO HOLD
WP CLK
GND DI
25Q64
C3 0.1uF
Flash_SPI_SCK
Flash_SPI_MOSI

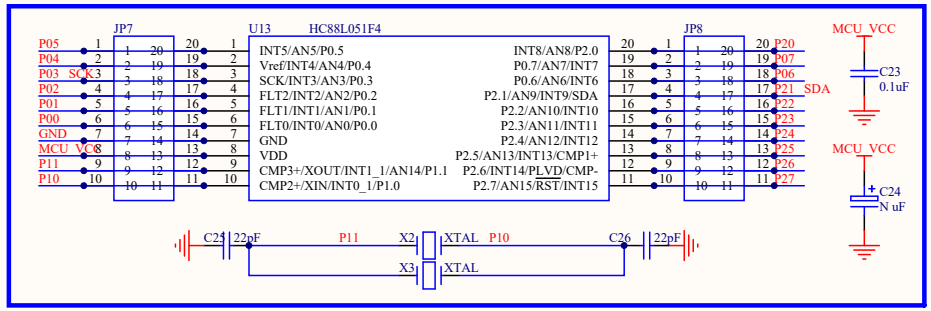

Vout_3.3V
LED1 LED2
R9 4.7K
R10 4.7K
LED2
LED1

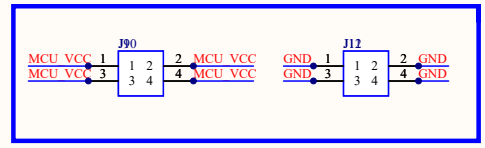

Vout_3.3V
K1
KEY
R17 10K

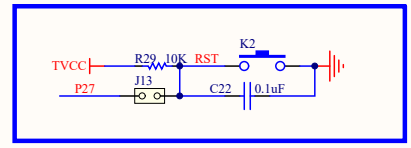

Vout_3.3V
GND
SWDIO
SWCLK
NREST
J2
J3
Vout_3.3V
GND
Uart1_TXD
Uart1_RXD

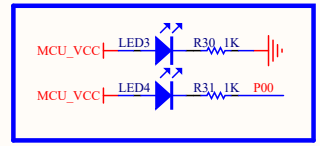

U4
KEY PA0 10
TEST_IO PA1 11
IO_RST PA2 12
IO_TDI PA3 13
1T45_DIR PA4 14
IO_TDO_SDO PA5 15
IO_TDO_SDI PA6 16
IO_TCK PA7 17
5V_ON/0FF PA8 29
Uart1_TXD PA9 30
Uart1_RXD PA10 31
USB_DM PA11 32
USB_DP PA12 33
Flash_SPI_CS PA15 38
IO_TMS PB0 18
AD_TVCC PB1 19
GND R23 10K PB2 20
Flash_SPI_SCK PB3 39
Flash_SPI_MISO PB4 40
Flash_SPI_MOSI PB5 41
R26 0R 42
IO_TDO_SDI R27 0R 43
Control_USB PB8 45
3.3V_ON/0FF PB9 46
Uart3_TXD PB10 21
Uart3_RXD PB11 22
TVCC_Down PB12 25
LED2 PB13 26
LED1 PB14 27
28
PA0/WKUP/ADC123_IN0/T2C1ETR/T5C1/T8ETR
PA1/ADC123_IN1/T5C2/T2C2
PA2/ADC123_IN2/USART2_Tx/T5C3/T2C3
PA3/ADC123_IN3/USART2_Rx/T5C4/T2C4
PA4/ADC123_IN4/DAC_OUT1/SPI1_NSS
PA5/ADC123_IN5/DAC_OUT2/SPI1_SCK
PA6/ADC123_IN6/SPI1_MISO/T8T1BKIN/T3C1
PA7/ADC123_IN7/SPI1_MOSI/T8C1N/T3C2/T1C1N
PA8/T1C1/MCO
PA9/T1C2/USART1_Tx
PA10/T1C3/USART1_Rx
PA11/CAN_Rx/T1C4/USBDM
PA12/CAN_Tx/T1ETR/USBDP
PA15/JTDI/I2S3_WS/JTDI/T2C1ETR/SPI3_NSS
PB0/ADC123_IN8/T3C3/T8C2N/T1C2N
PB1/ADC123_IN9/T3C4/T8C3N/T1C3N
PB2/BOOT1
PB3/JTDO/SPI3_SCK/I2S3_CK/T2C2/SPI1_SCK
PB4/NJTRST/SPI3_MISO/T3C1/SPI1_MISO
PB5/I2C1_SMBA/I2S3_SD/SPI3_MOSI/T3C2/SPI1_MOSI
PB6/I2C1_SCL/T4C1/USART1_Tx
PB7/I2C1_SDA/FSMC_NADV/USART1_Rx
PB8/SDIO_D4/I2C1_SCL/T4C3(7)/CAN_Rx
PB9/SDIO_D5/I2C1_SDA/T4C4/CAN_Tx
PB10/USART3_Tx/I2C2_SCL/T2C3
PB11/USART3_Rx/I2C2_SDA/T2C4
PB12/I2S2_WS/T1BKIN/SPI2_NSS/I2C2_SMBA
PB13/I2S2_CK/T1CH1N/SPI2_SCK
PB14/T1CH2N/SPI2_MISO
PB15/I2S2_SD/T1CH3N/SPI2_MOSI
VBAT
PC13-TAMPER-RTC
PC14-OSC32_IN
PC15-OSC32_OUT
OSC_IN
OSC_OUT
NRST
BOOT0
PA13/JTMS/SWDIO
PA14/JTCK/SWCLK
VDDA
VSSA
VDD_1
VDD_2
VDD_3
VSS_1
VSS_2
VSS_3
STM32F103C
Vout_3.3V
C10 22pF
X1 8M
C11 22pF
NRESET
R20 10K
J4
SWDIO
SWCLK
GND
C16 0.1uF
C17 0.1uF
C18 0.1uF
C19 0.1uF

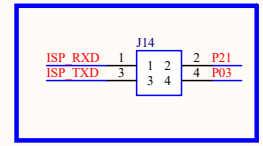

U5
U6
U7
U8
U9
U10
U11
U12
VCCA VCCB
GND DIR
A B
74LVC1T45DW
Vout_3.3V
TVCC
GND
IO_TDI
IO_RST
IO_TMS
IO_TCK
IO_TDO_SDI
IO_TDO_SDO
Uart3_RXD
Uart3_TXD
R18 27 TDI
R19 27 RST
R21 27 TMS
R22 27 TCK
R24 1KTDO
R25 27 TDO
R32 27 ISP_RXD
R33 27 ISP_TXD
C12 C13
C14 C15
C20 C21
0.1uF
J6
JTAG
TMS
SCK
TCK
SDA
TDO
TDI
GND
TCK/SCK
TDO/SDA
SWIM
RST
TVCC
ISP_RXD
ISP_TXD
R28 27 TEST_IO
RST

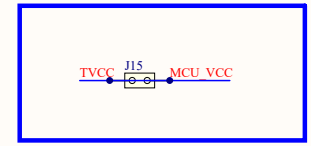

JP7
U13 HC88L051F4
JP8
P05
P04
P03_SCK
P02
P01
P00
GND
MCU_VCC
P11
P10
INT5/AN5/P0.5
Vref/INT4/AN4/P0.4
SCK/INT3/AN3/P0.3
FLT2/INT2/AN2/P0.2
FLT1/INT1/AN1/P0.1
FLT0/INT0/AN0/P0.0
GND
VDD
CMP3+/XOUT/INT1_1/AN14/P1.1
CMP2+/XIN/INT0_1/P1.0
INT8/AN8/P2.0
P0.7/AN7/INT7
P0.6/AN6/INT6
P2.1/AN9/TDI/SDA
P2.2/AN10/INT10
P2.3/AN11/INT11
P2.4/AN12/INT12
P2.5/AN13/INT13/CMP1+
P2.6/INT14/PLVD/CMP-
P2.7/AN15/RST/INT15
P20
P07
P06
P21 SDA
P22
P23
P24
P25
P26
P27
C23 0.1uF
C24 N uF
C25 22pF
C26 22pF
X2
X3
XTAL
P10
P11


J90
J12
MCU_VCC
GND


TVCC
R29 10K RST
K2
P27
J13
C22 0.1uF


MCU_VCC
LED3
R30 1K
LED4
R31 1K P00


J14
ISP_RXD
ISP_TXD
P21
P03


TVCC
J15
MCU_VCC