STM32 DEMO PCB

POWER SUPPLY

VBUS
+3.3V

U2
AMS1117-3.3

D1
RED

VI VO
GND

3   2
1

C12
22uF

C13
22uF

R3
1.5K

VBUS from USB computer (nom. +5v)   Min. 22uF inp./outp. caps
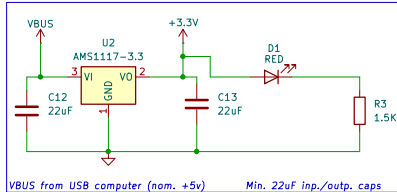
MICROCONTROLLER AND USB

1 * 100nF per VDD pin

+3.3V
+3.3V PWR_FLAG

FB1
FerriteBead
+3.3V

VDDA Filtering

C5   C4   C3   C2   C1
100nF   100nF   100nF   100nF   100nF

C6   C7   C8
100nF   1uF   1uF

U1

NRST
BOOT0

NRST   VBAT
BOOT0   VDD
        VDD
        VDD
        VDDA

PA0
PA1
PA2
PA3
PA4
PA5
PA6
PA7
PA8
PA9
PA10
PA11
PA12
PA13
PA14
PA15

+3.3V
SW1
SW_SPDT

R1
10K

C9
100nF

PD0
PD1

HSE_IN
HSE_OUT

PC13
PC14
PC15

Y1
16MHz

C10
10pF

C11
10pF

CL = 2*(CLo − Cs) = 2*(10−5)pF=10pF

PB0
PB1
PB2
PB3
PB4
PB5
PB6
PB7
PB8
PB9
PB10
PB11
PB12
PB13
PB14
PB15

USART1_TX
USART1_RX

I2C2_SCL
I2C2_SDA

+3.3V

J3
Conn_01x04_Pin

Pin out using STM 32 IDE

+3.3V
+3.3V

R4   R5
1.5K   1.5K

J4
Conn_01x04_Pin

VSS
VSSA

STM32F103C8Tx

USB_D−
USB_D+
SWDIO
SWCLK

USB app note AN4879

+3.3V

R2
1.5K

VBUS

J1
USB_B_Micro

VBUS
D+
D−
ID
GND
Shield

+3.3V

J2
Conn_01x04_Pin

MOUNTING HOLES

H1
MountingHole
H2
MountingHole
H3
MountingHole
H4
MountingHole

M2