Microcontroller

1x 100nF per VDD

+3.3V +3.3VA   PWR_FLAG   FB1 120R   +3.3V

C5 10u   C4 100n   C3 100n   C2 100n   C1 100n

C6 10n   C7 1u   C8 1u

VBAT VDD VDD VDD VDDA   U1
1 24 36 48 9

NRST   7 NRST   PA0 10 PA0
                        PA1 11 PA1
BOOT0   44 BOOT0   PA2 12 PA2
                        PA3 13 PA3
C9 100n   +3.3V   PA4 14 PA4
          R1 10k BOOT0 PA5 15 PA5
          SW_BOOT0   PA6 16 PA6
3   PA7 17 PA7
2   PA8 29 PA8
1   PA9 30 PA9
SW_SPDT   PA10 31 PA10
SW1   HSE_IN 5 PD0 PA11 32 USB_D−
         HSE_OUT 6 PD1 PA12 33 USB_D+
                        PA13 34 PA13
CL=2*(CL0−Cs)=2*(10−5)pF=10pF PA14 37 PA14
         PC13 2 PC13 PA15 38 PA15
         PC14 3 PC14
         PC15 4 PC15

Y1 16MHZ
2
1   3
4

C10 10p   C11 10p

PB0 18 PB0
PB1 19 PB1
PB2 20 PB2
PB3 39 PB3
PB4 40 PB4
PB5 41 PB5
PB6 42 PB6
PB7 43 PB7
PB8 45 PB8
PB9 46 PB9
PB10 21 PB10
PB11 22 PB11
PB12 25 PB12
PB13 26 PB13
PB14 27 PB14
PB15 28 PB15

VSS VSSA
23 8
STM32F103C8T6

+3.3V
R2 1k5

VBUS

J1
ID   4 5 GND 6
D − 2   Shield
D + 3
VBUS 1
USB_B_Micro

Pin Headers

J2 J3
PA2 1   1 PA3
PA1 2   2 PA4
PA0 3   3 PA5
PC15 4   4 PA6
PC14 5   5 PA7
PC13 6   6 PB0
PB9 7   7 PB1
PB8 8   8 PB2
PB7 9   9 PB10
PB6 10   10 PB11
PB5 11   11 PB12
PB4 12   12 PB13
PB3 13   13 PB14
PA15 14   14 PB15
PA14 15   15 PA8
+3.3V 16 16 PA9
VBUS 18   17 PA10
          18 PA13
Conn_01x18 Conn_01x18

Power Supply

VBUS   U2   +3.3V   D1 BLUE
              AMS1117−3.3
          3 VI   VO 2   PWR_LED_K
C13 22u   GND   C12 22u   R3 1k5
          1

VBUS from USB connector. Min 22uF inp/outp caps

Holes

H1 MountingHole
H2 MountingHole
H3 MountingHole
H4 MountingHole