Cann

MCU

PA0 10 PA0-WUKP PB0 18 PB0
PA1 11 PA1 PB1 19 PB1
PA2 12 PA2 PB2/BOOT1 20 BOOT1
PA3 13 PA3 PB3/JTDO 39 PB3
PA4 14 PA4 PB4/JNTRST 40 PB4
PA5 15 PA5 PB5 41 PB5
PA6 16 PA6 PB6 42 PB6
PA7 17 PA7 PB7 43 PB7

PA8 29 PA8 PB8 45 PB8
PA9 30 PA9 PB9 46 PB9
PA10 31 PA10 PB10 21 PB10
USB_N 32 PA11 PB11 22 PB11
USB_P 33 PA12 PB12 25 PB12
SWDIO 34 PA13/JTMS/SWDIO PB13 26 PB13
SWCLK 37 PA14/JTCK/SWCLK PB14 27 PB14
PA15 38 PA15/JTDI PB15 28 PB15

5 OSC_IN/PD0 PC13-TAMPER-RTC 2 PC13
6 OSC_OUT/PD1 PC14-OSC32_IN 3 PC14
PC15-OSC32_OUT 4 PC15

BOOT0 44 BOOT0
7 NRST
1 VBAT
24 VDD_1 VSS_1 23
36 VDD_2 VSS_2 35
48 VDD_3 VSS_3 47
9 VDD_A VSSA 8

U1

C1 20pF
C2 20pF
X1
GND
3V3
R7 10K
NRST
S1
SW-PB
C3 0.1uF
R6 10K
GND
GND
3V3

SWD

P1
4 SWDIO
3 SWCLK
2
1
Header 4
3V3
GND

LED

3V3
D1 RED   D2 GREEN
R4 1K   R5 1K
GND
PB12

POWER

5V_USB
J3
1 VCC MH4 9
2 D- MH3 8
3 D+ MH2 7
4 ID MH1 6
5 GND
Micro USB B
USB_N
USB_P
GND
GND

5V_USB
U2
1 Vin Vout 5
2 GND
3 EN BP 4
RT9193-33
C6 1uf
C7 223
C4 1uf
C5 104
3V3
GND
GND
GND

HEADER

J1
1 GND
2 PC13 3V3
3 PC14
4 PC15
5 PA0
6 PA1
7 PA2
8 PA3
9 PA4
10 PA5
11 PA6
12 PA7
13
14 PB0 GND
15 PB1
16 PB10
17 PB11
18
19 3V3
20 GND
Header 20

J2
1 GND
2 PB9 3V3
3 PB8
4 PB7
5 PB6
6 PB5
7 PB4
8 PB3
9 PA15
10
11 PA10 GND
12 PA9
13 PA8
14 PB15
15 PB14
16 PB13
17 PB12
18
19 3V3
20 GND
Header 20

R2 10K GND

BOOT0
GND

Title		
Size A4	Number	Revision
Date:	2019/4/4	Sheet of
File:	G:\oss\..\nanoSTM32.SchDoc	Drawn By:

Designator	Footprint	Description	Comment	Quantity	Value
C1, C2	0603_C	Capacitor	C0603	2	20pF
C3	0603_C	Capacitor	C0603	1	0.1uF
C4, C6	0603_C	Capacitor	1uf	2	1uF
C5	0603_C	Capacitor	104	1	0.1uF
C7	0603_C	Capacitor	223	1	223
D1	0603_LED	Typical RED, GREEN, YELLOW, AMBER GaAs LED	RED	1	
D2	0603_LED	Typical RED, GREEN, YELLOW, AMBER GaAs LED	GREEN	1	
J1, J2	HEADER_20x1		Header 20	2	
J3	MICRO_USB		Micro USB B	1	
logo			logo	1	
P1	HEADER_4x1	Header, 4-Pin	Header 4	1	
R2, R6, R7	0603_R	Resistor	R0603	3	10K
R4, R5	0603_R	Resistor	R0603	2	1K
S1	SMT_SW_PTS_820	Switch	SW-PB	1	
U1	LQFP48_N	LowPower MCU	STM32F103C8T6	1	
U2	SOT23-5		RT9193-33	1	
X1	49SMD		XTAL	1	8MHz