VCC3V3

10K, 0603 R4

RESET

S1
SW-PB

C5
105,0603

GND

VCC3V3

P2
1 2
3 4
5 6
Header 3X2

BOOT0 R5 100K, 0603
R6 100K, 0603 BOOT1

GND

PC15 Y1 1 2 PC14
32768
C1 20pF   C2 20pF

GND

OSC_IN Y2 1 2 OSC_OUT
8M
R1 1M 1K
C3 20pF   C4 20pF

GND

P1
1
2
3
4
Header 4

VCC3V3
SWDIO
SWCLK
R3 VCC3V3
Res Semi 10K

R2 10K
Res Semi

GND
GND

P3
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
Header 18

+5
PA12
PA11
VCC3V3
PA0
PA1
PA2
PA3
PA4
PA5
PA6
PA7
PB14
PB13

VCC3V3

D1
LED1

R7
510R, 0603

GND

U1A
STM32F103C8T6

PA0   10 PA0-WKUP   PB0   18 PB0
PA1   11 PA1   PB1   19 PB1
PA2   12 PA2   PB2   20 BOOT1
PA3   13 PA3   PB3   39
PA4   14 PA4   PB4   40
PA5   15 PA5   PB5   41
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
PA11 32 PA11   PB11 22 PB11
PA12 33 PA12   PB12 25 PB12
SWDIO 34 PA13   PB13 26 PB13
SWCLK 37 PA14   PB14 27 PB14
PA15 38 PA15   PB15 28 PB15

          2 PC13-TAMPER-RTC   PD0-OSC_IN 5 OSC_IN
PC14 3 PC14-OSC32_IN   PD1   6 OSC_OUT
PC15 4 PC15-OSC32_OUT
                               BOOT0 44 BOOT0
                               NRST   7   RESET

P7
1
2
3
4
Header 4 NO USED

PB11

P6
1
2
3
4
Header 4-DHT11

+5
5K,0603 R8
+5
PA15

GND

P9
1
2
Header 2

Micro Usb
VBUS 1 +5
D-   2
D+   3
ID   4
GND   5

GND

BAT 1

U1B
STM32F103C8T6

VCC3V324 VDD_1   VSS_1   23
VCC3V336 VDD_2   VSS_2   35
VCC3V348 VDD_3   VSS_3   47   GND
VCC3V3 9 VDDA   VSSA   8   GND
          VBAT

P8
1
2
3
4
Header 4 COMM

VCC3V3
PA9
PA10

GND

C10 104,0603 C11 104,0603 C12 104,0603 C13 104,0603
VCC3V3
GND

VCC3V3

5K,0603 R9
VCC3V3 PB0
R10
5K,0603 PB1
R11
5K,0603 PB10
R12
5K,0603 PB12
R13
5K,0603 PB9
R14
5K,0603 PB8
R15
5K,0603 PB7
R16
5K,0603 PB6

S2 SW-PB
S3 SW-PB
S4 SW-PB
S5 SW-PB
S6 SW-PB
S7 SW-PB
S8 SW-PB
S9 SW-PB

GND

+5
C6 10V,100uF
C7 104,0603

AMS-1117
3 IN   OUT 2
1 GND   OUT 4

AMS-1117

VCC3V3
C8 6.3V,330uF
C9 104,0603

GND   GND   GND

U2
ULN2003D

PA8 1 IN1   OUT1 16
PB15 2 IN2   OUT2 15
     3 IN3   OUT3 14
     4 IN4   OUT4 13
     5 IN5   OUT5 12
     6 IN6   OUT6 11
     7 IN7   OUT7 10
     8 GND   COM   9

GND

J1
1   2
    3

+5
5 5

RWLAY-SPDT

P4
1
2
3
Header 3

J2
1   2
    3

+5
5 5

+5

RWLAY-SPDT

P5
1
2
3
Header 3

Title

Size A4   Number   Revision

Date: 2014/3/12   Sheet of
File: E:\code\..\MainBorad.SchDoc   Drawn By:

Bill of Materials

<Parameter Title not found>

Source Data From: **stm32.PrjPCB**

Project: **stm32.PrjPCB**

Variant: **None**

Creation Date: 2014/3/12   9:14:00

Print Date: 41710   41710.38486

Footprint	Comment	LibRef	Designator	Description	Quantity
SOT223	AMS-1117	AMS-1117	AMS-1117		1
0603	Cap Semi	Cap Semi	C1, C2, C3, C4, C5, C7, C9, C10, C11, C12, C13	Capacitor (Semiconductor SIM Model)	11
C0805	Cap Pol3	Cap Pol3	C6	Polarized Capacitor (Surface Mount)	1
C0805	6.3V,330uF	Cap Pol3	C8	Polarized Capacitor (Surface Mount)	1
0805	LED1	LED1	D1	Typical RED GaAs LED	1
relay	RWLAY-SPDT	RWLAY-SPDT	J1, J2		2
Micro_USB	Micro Usb	Micro Usb	Micro Usb		1
HDR1X4	Header 4	Header 4	P1	Header, 4-Pin	1
HDR2X3	Header 3X2	Header 3X2	P2	Header, 3-Pin, Dual row	1
HDR1X18	Header 18	Header 18	P3	Header, 18-Pin	1
HDR1X3	Header 3	Header 3	P4, P5	Header, 3-Pin	2
HDR1X4	Header 4-DHT11	Header 4	P6	Header, 4-Pin	1
HDR1X4	Header 4 NO USED	Header 4	P7	Header, 4-Pin	1
HDR1X4	Header 4 COMM	Header 4	P8	Header, 4-Pin	1
HDR1X2	Header 2	Header 2	P9	Header, 2-Pin	1
0603	1M	Res Semi	R1	Semiconductor Resistor	1
0603	Res Semi	Res Semi	R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14, R15, R16	Semiconductor Resistor	15
SPST-2	SW-PB	SW-PB	S1, S2, S3, S4, S5, S6, S7, S8, S9	Switch	9
LQFP48_N	STM32F103C8T6	STM32F103C8T6	U1	STM32 ARM-based 32-bit MCU Performance Line with 64 kB Flash, 20 kB Internal RAM, -40 to +85癈 Temperature, 48-Pin LQFP, Tray	1
SO16_N	ULN2003D	ULN2003D	U2	Seven Darlington Array	1
R38	32768	XTAL	Y1	Crystal Oscillator	1
XTAL1	8M	XTAL	Y2	Crystal Oscillator	1
					56

Approved   **Notes**