A

U1

3.3V — 9 — VDDA

GND — 8 — VSSA

3.3V — 24 / 36 / 48 — VDD_1 / VDD_2 / VDD_3

GND — 23 / 35 / 47 — VSS_1 / VSS_2 / VSS_3

3.3V — 1 — VBAT

TIM3_CH3/ADC12_IN8/PB0 — 18 — PB0
TIM3_CH4/ADC12_IN9/PB1 — 19 — PB1
BOOT1/PB2 — 20 — BOOT1
JTDO/PB3 — 39 — PB3
JNTRST/PB4 — 40 — PB4
I2C1_SMBAL/PB5 — 41 — PB5
TIM4_CH1/I2C1_SCL/PB6 — 42 — PB6
TIM4_CH2/I2C1_SDA/PB7 — 43 — PB7

R1 10K — GND

TIM4_CH3/PB8 — 45 — PB8
TIM4_CH4/PB9 — 46 — PB9
USART3_TX/I2C2_SCL/PB10 — 21 — PB10
USART3_RX/I2C2_SDA/PB11 — 22 — PB11
TIM1_BKIN/USART3_CK/I2C2_SMBAL/SPI2_NSS/PB12 — 25 — PB12
TIM1_CH1N/USART3_CTS/SPI2_SCK/PB13 — 26 — PB13
TIM1_CH2N/USART3_RTS/SPI2_MISO/PB14 — 27 — PB14
TIM1_CH3N/SPI2_MOSI/PB15 — 28 — PB15

LED — R5 4K7 — 3.3V
D1

PA0 — 10 — PA0/WKUP/USART2_CTS/ADC12_IN0/TIM2_CH1_ETR
PA1 — 11 — PA1/USART2_RTS/ADC12_IN1/TIM2_CH2
PA2 — 12 — PA2/USART2_TX/ADC12_IN2/TIM2_CH3
PA3 — 13 — PA3/USART2_RX/ADC12_IN3/TIM2_CH4
PA4 — 14 — PA4/SPI1_NSS/USART2_CK/ADC12_IN4
PA5 — 15 — PA5/SPI1_SCK/ADC12_IN5
PA6 — 16 — PA6/SPI1_MISO/ADC12_IN6/TIM3_CH1
PA7 — 17 — PA7/SPI1_MOSI/ADC12_IN7/TIM3_CH2

NRST — 7 — NRST
BOOT0 — 44 — BOOT0

C1 0.1uF

R6 10K

J2
2 — R4 10K — Key1 K1 — KEY
1
SIP2 — 3.3V — GND

PA8 — 29 — PA8/USART1_CK/TIM1_CH1/MCO
UART1_TX — 30 — PA9/USART1_TX/TIM1_CH2
UART1_RX — 31 — PA10/USART1_RX/TIM1_CH3
CANRX — 32 — PA11/USART1_CTS/CANRX/TIM1_CH4/USBDM
CANTX — 33 — PA12/USART1_RTS/CANTX/TIM1_ETR/USBDP
SWDIO — 34 — PA13/JTMS/SWDIO
SWCLK — 37 — PA14/JTCK/SWCLK
PA15 — 38 — PA15/JTDI

PC13-TAMPER-RTC — 2 — KEY
PC14-OSC32_IN — 3 — PC14
PC15-OSC32_OUT — 4 — PC15

OSC_IN — 5 — XTAL1
OSC_OUT — 6 — XTAL2

Y1 — XTAL1

C2 22P — 8M — C3 22P

GND

STM32F103C8T6

J3
1 — VCC
2 — GND
3 — TXD — R2 100R — UART1_TX
4 — RXD — R3 100R — UART1_RX
UART

J1
1 — VCC
2 — GND
3 — SWCLK
4 — SWDIO
SWIM

U3
VCC — 3 — VIN
VOUT — 2 — 3.3V
VSS — 1
XC6206P332MR

C5 10uF
C8 1uF
C7 1uF
C6 0.1uF
GND

U2
CANTX — 1 — TXD   S — 8 — GND
GND — 2 — GND   CANH — 7 — CANH
VCC — 3 — VCC   CANL — 6 — CANL
CANRX — 4 — RXD   VREF — 5 — VREF
C4 0.1uF
TJA1050T

J4
3 — CANH
2 — CANL
1 — VREF
CAN

GND
VCC

Title			
Size A4	Number		Revision
Date:	2015/3/21		Sheet of
File:	D:\work\..\UARTCAN.SchDoc		Drawn By:
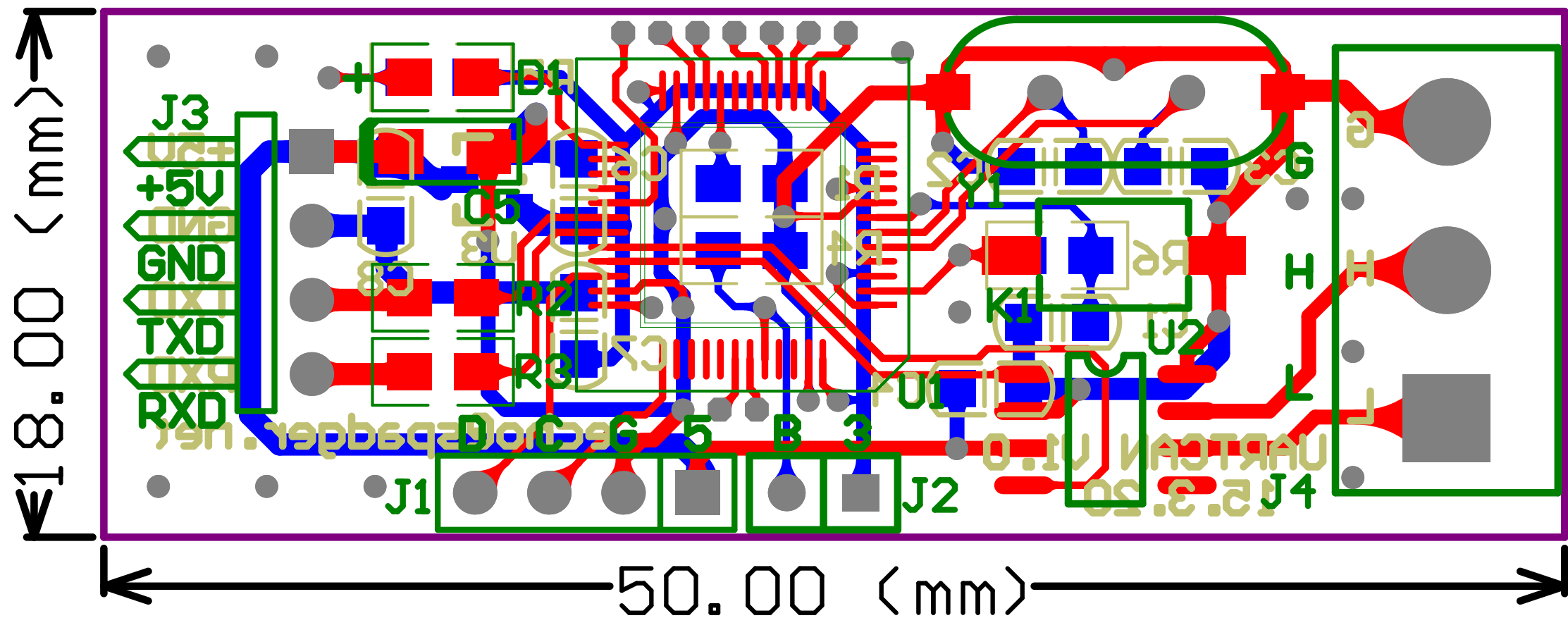
Comment	Description	Designator	Footprint	LibRef	Quantity
0.1uF	0.1uF 0805 50 V± 20% -25~+85 ℃ Y5V, 0805 表贴电	C1, C4, C6	C0805	C0805_104, CAP	3
22P	22P 0805 表贴电	C2, C3	C0805	CAP	2
10uF	D7343 封装，耐压 >10V	C5	C1206A	ELECTRO1	1
1uF	0805 表贴电容	C7, C8	C0805	CAP	2
LED	0805 贴片 LED	D1	D0805	LED0805	1
SWIM	2.54，4-Pin 直针 插针	J1	HDR2.54-1X4	HDR2.54-1X4	1
SIP2	2.54，90度，插针	J2	SIP2	CON2	1
UART	2.54，90度，4-Pin 插针	J3	HDR1X4H	HDR2.54-1X4H	1
CAN	5.08，3-Pin 端子	J4	HDR-5.08-3	HDR-5.08-3	1
Key1	表贴轻触按键	K1	SW-3x6x2.5	SW-3x6x2.5	1
10K	表贴电阻 10k Ω 1/16W ± 1% ± 200ppm	R1, R4, R6	R0805	R0805-10K	3
100R	表贴电阻 100 Ω 1/16W ± 1% ± 200ppm	R2, R3	R0805	R0805-100R	2
4K7	表贴电阻 4.7k Ω 1/16W ± 1% ± 200ppm	R5	R0805	R0805-4K7	1
STM32F103C8T6	STM32 ARM-based 32-bit MCU with 64 Kbytes Flash, 48-pin LQFP, Industrial	U1	LQFP-48	STM32F103C8T6	1
TJA1050T	High speed CAN transceiver	U2	SO-8	TJA1050T	1
XC6206P332MR	662K 3.3V 输出	U3	SOT-23	XC6206P332MR	1
8M	8M 49S 直插晶振	Y1	XTAL-3	HC-49S-8M	1