USB to JTAG bridge

3.3V budget Version

IC3PORTA_L
- JTAG_TDO — R15 — 10 — PA0 — 10
- JTAG_TMS — R16 — 10 — PA1 — 11
- JTAG_TDI — R17 — 10 — PA2 — 12
- JTAG_TCK — R18 — 10 — PA3 — 13
- PA4 — 14
- SPI_CS — PA5 — 15
- JTAG_TCK — R23 — 10 — PA6 — 16
- JTAG_TMS — R20 — 10 — PA7 — 17

Act as Slave SPI

IC3PORTB_L
- PB0 — 18
- PB1 — 19
- PB2 — 20
- PB3 — 39
- PB4 — 40
- PB5 — 41
- PB6 — 42
- PB7 — 43

GND

IC3PORTA_H
- UART_TXD — PA8 — 29
- UART_RXD — PA9 — 30
- PA10 — 31
- R2 — 22 — R3 — 1.5k — PA11 — 32
- R1 — 22 — PA12 — 33
- SWD — PA13 — 34
- 3 — PA14 — 37
- 2 — PA15 — 38
- 1

IC3PORTB_H
- PB8 — 45
- PB9 — 46
- PB10 — 21
- PB11 — 22
- SPI_CS — PB12 — 25
- PB13 — R19 — 26 — JTAG_TCK
- PB14 — R21 — 10 — 27 — JTAG_TDO
- PB15 — R22 — 10 — 28 — JTAG_TDI

Act as master SPI

GND

STAT
R5 — 1.5k
VCCINT
DNP — R8 — +3V3
INT

J1 +5V
- VCC
- D−
- D+
- ID
- GND
SHIELD
GND
GND

IC1
REG1117
VIN VOUT
GND
+5V — 3 — C1 — 10u — GND
+3V3 — 2 — C2 — 10u — GND
GND — 1

IC3POWER
- VDD_1 — 24
- VDD_2 — 36
- VDD_3 — 48
- +3V3
- C6 10u — C3 10u
- VSS_1 — 23
- VSS_2 — 35
- VSS_3 — 47
GND

IC3AN_POWER +3V3
- VBAT — 1
- +3V3
- VDDA — 9
- VSSA — 8
GND

IC3RESET
- NRST — 7 — R4 — 1.5k — +3V3
- BOOT0 — 44 — R6 — 1.5k — GND
STM32F10XCXT6

R7 +3V3 — 1.5k
PWR
GND

IC3PORTC
- PC13 — 2
- PC14 — 3
- PC15 — 4

IC3PORTD/OSC
- PD0/OSC<= — 5 — Q1 8M
- PD1/OSC=> — 6 — C5 22p — C4 22p
GND

CON2 SIDESMT
VCCINT
INT
R13 — 22 — R14 — 22 — UART_TXD
UART_RXD
GND

CON1 SIDESMT
- JTAG_TCK
- JTAG_TDO
- JTAG_TMS
- JTAG_TDI