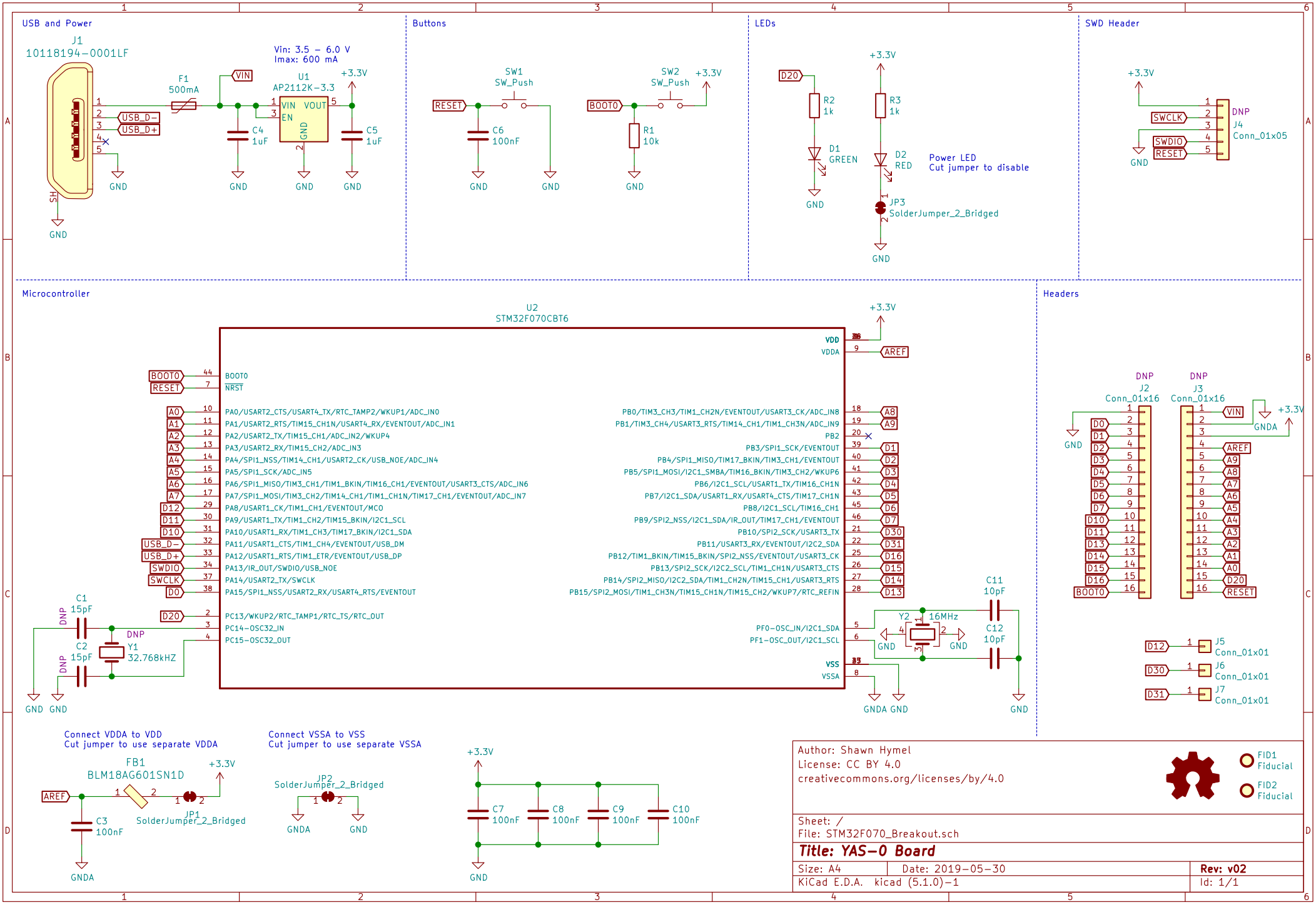
USB and Power
J1
10118194-0001LF
Vin: 3.5 - 6.0 V
Imax: 600 mA
F1
500mA
VIN
U1
AP2112K-3.3
+3.3V
USB_D-
USB_D+
C4
1uF
C5
1uF
GND
Buttons
SW1
SW_Push
RESET
C6
100nF
SW2
SW_Push
BOOT0
R1
10k
LEDs
D20
R2
1k
D1
GREEN
R3
1k
D2
RED
Power LED
Cut jumper to disable
JP3
SolderJumper_2_Bridged
SWD Header
SWCLK
SWDIO
RESET
DNP
J4
Conn_01x05
Microcontroller
U2
STM32F070CBT6
VDD
VDDA
AREF
BOOT0
NRST
PA0/USART2_CTS/USART4_TX/RTC_TAMP2/WKUP1/ADC_IN0
PA1/USART2_RTS/TIM15_CH1N/USART4_RX/EVENTOUT/ADC_IN1
PA2/USART2_TX/TIM15_CH1/ADC_IN2/WKUP4
PA3/USART2_RX/TIM15_CH2/ADC_IN3
PA4/SPI1_NSS/TIM14_CH1/USART2_CK/USB_NOE/ADC_IN4
PA5/SPI1_SCK/ADC_IN5
PA6/SPI1_MISO/TIM3_CH1/TIM1_BKIN/TIM16_CH1/EVENTOUT/USART3_CTS/ADC_IN6
PA7/SPI1_MOSI/TIM3_CH2/TIM14_CH1/TIM1_CH1N/TIM17_CH1/EVENTOUT/ADC_IN7
PA8/USART1_CK/TIM1_CH1/EVENTOUT/MCO
PA9/USART1_TX/TIM1_CH2/TIM15_BKIN/I2C1_SCL
PA10/USART1_RX/TIM1_CH3/TIM17_BKIN/I2C1_SDA
PA11/USART1_CTS/TIM1_CH4/EVENTOUT/USB_DM
PA12/USART1_RTS/TIM1_ETR/EVENTOUT/USB_DP
PA13/IR_OUT/SWDIO/USB_NOE
PA14/USART2_TX/SWCLK
PA15/SPI1_NSS/USART2_RX/USART4_RTS/EVENTOUT
PC13/WKUP2/RTC_TAMP1/RTC_TS/RTC_OUT
PC14-OSC32_IN
PC15-OSC32_OUT
PB0/TIM3_CH3/TIM1_CH2N/EVENTOUT/USART3_CK/ADC_IN8
PB1/TIM3_CH4/USART3_RTS/TIM14_CH1/TIM1_CH3N/ADC_IN9
PB2
PB3/SPI1_SCK/EVENTOUT
PB4/SPI1_MISO/TIM17_BKIN/TIM3_CH1/EVENTOUT
PB5/SPI1_MOSI/I2C1_SMBA/TIM16_BKIN/TIM3_CH2/WKUP6
PB6/I2C1_SCL/USART1_TX/TIM16_CH1N
PB7/I2C1_SDA/USART1_RX/USART4_CTS/TIM17_CH1N
PB8/I2C1_SCL/TIM16_CH1
PB9/SPI2_NSS/I2C1_SDA/IR_OUT/TIM17_CH1/EVENTOUT
PB10/SPI2_SCK/USART3_TX
PB11/USART3_RX/EVENTOUT/I2C2_SDA
PB12/TIM1_BKIN/TIM15_BKIN/SPI2_NSS/EVENTOUT/USART3_CK
PB13/SPI2_SCK/I2C2_SCL/TIM1_CH1N/USART3_CTS
PB14/SPI2_MISO/I2C2_SDA/TIM1_CH2N/TIM15_CH1/USART3_RTS
PB15/SPI2_MOSI/TIM1_CH3N/TIM15_CH1N/TIM15_CH2/WKUP7/RTC_REFIN
PF0-OSC_IN/I2C1_SDA
PF1-OSC_OUT/I2C1_SCL
VSS
VSSA
C1
15pF
C2
15pF
Y1
32.768kHZ
Y2
16MHz
C11
10pF
C12
10pF
GNDA
Headers
J2
Conn_01x16
J3
Conn_01x16
GNDA
J5
Conn_01x01
J6
Conn_01x01
J7
Conn_01x01
Connect VDDA to VDD
Cut jumper to use separate VDDA
FB1
BLM18AG601SN1D
C3
100nF
JP1
SolderJumper_2_Bridged
Connect VSSA to VSS
Cut jumper to use separate VSSA
JP2
SolderJumper_2_Bridged
C7
100nF
C8
100nF
C9
100nF
C10
100nF
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FID1
Fiducial
FID2
Fiducial
Sheet: /
File: STM32F070_Breakout.sch
Title: YAS-0 Board
Size: A4
Date: 2019-05-30
Rev: v02
KiCad E.D.A. kicad (5.1.0)-1
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