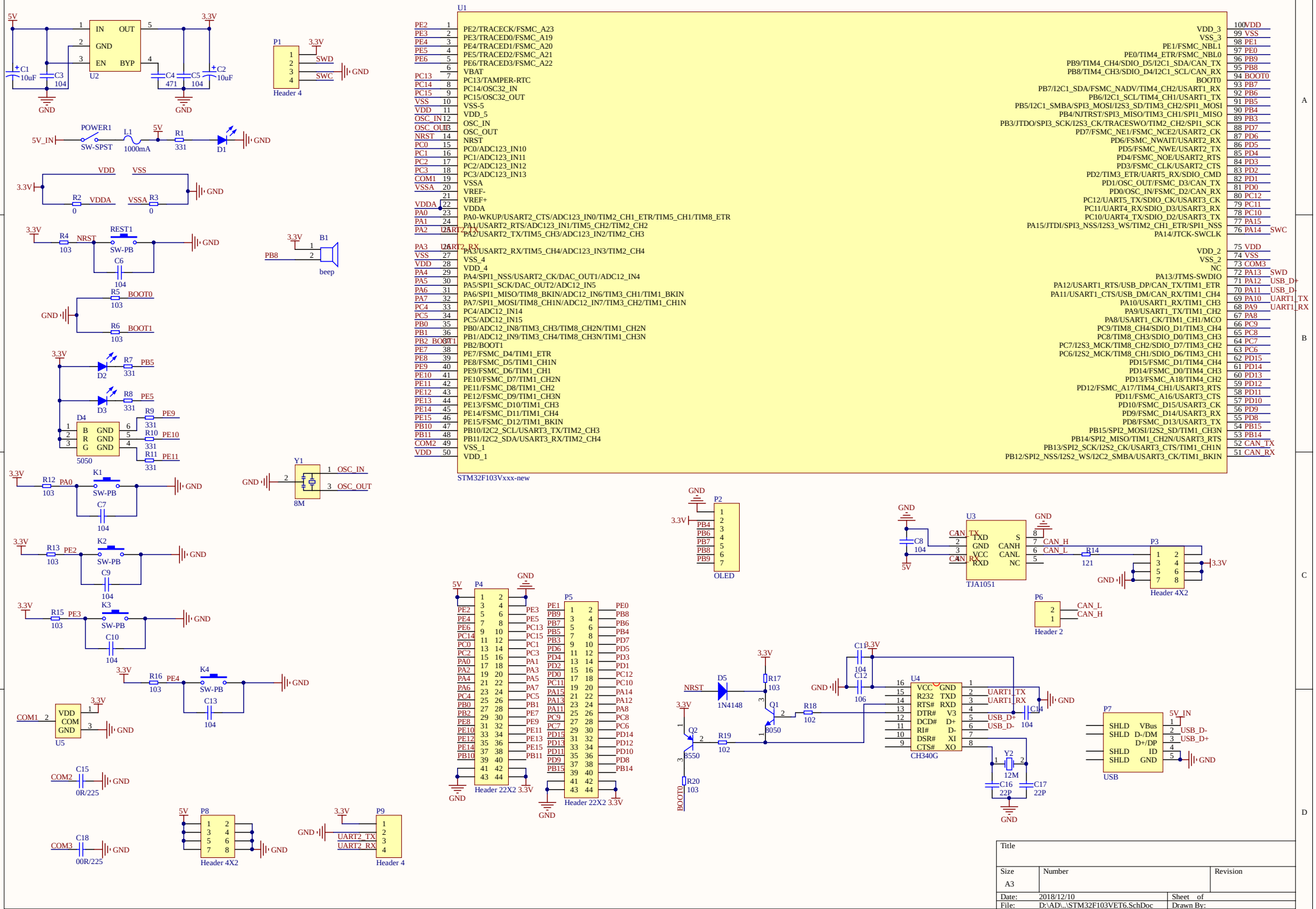
U1
STM32F103Vxxx-new
PE2/TRACECK/FSMC_A23
PE3/TRACED0/FSMC_A19
PE4/TRACED1/FSMC_A20
PE5/TRACED2/FSMC_A21
PE6/TRACED3/FSMC_A22
VBAT
PC13/TAMPER-RTC
PC14/OSC32_IN
PC15/OSC32_OUT
VSS-5
VDD_5
OSC_IN
OSC_OUT
NRST
PC0/ADC123_IN10
PC1/ADC123_IN11
PC2/ADC123_IN12
PC3/ADC123_IN13
VSSA
VREF-
VREF+
VDDA
PA0-WKUP/USART2_CTS/ADC123_IN0/TIM2_CH1_ETR/TIM5_CH1/TIM8_ETR
PA1/USART2_RTS/ADC123_IN1/TIM5_CH2/TIM2_CH2
PA2/USART2_TX/TIM5_CH3/ADC123_IN2/TIM2_CH3
PA3/USART2_RX/TIM5_CH4/ADC123_IN3/TIM2_CH4
VSS_4
VDD_4
PA4/SPI1_NSS/USART2_CK/DAC_OUT1/ADC12_IN4
PA5/SPI1_SCK/DAC_OUT2/ADC12_IN5
PA6/SPI1_MISO/TIM8_BKIN/ADC12_IN6/TIM3_CH1/TIM1_BKIN
PA7/SPI1_MOSI/TIM8_CH1N/ADC12_IN7/TIM3_CH2/TIM1_CH1N
PC4/ADC12_IN14
PC5/ADC12_IN15
PB0/ADC12_IN8/TIM3_CH3/TIM8_CH2N/TIM1_CH2N
PB1/ADC12_IN9/TIM3_CH4/TIM8_CH3N/TIM1_CH3N
PB2/BOOT1
PE7/FSMC_D4/TIM1_ETR
PE8/FSMC_D5/TIM1_CH1N
PE9/FSMC_D6/TIM1_CH1
PE10/FSMC_D7/TIM1_CH2N
PE11/FSMC_D8/TIM1_CH2
PE12/FSMC_D9/TIM1_CH3N
PE13/FSMC_D10/TIM1_CH3
PE14/FSMC_D11/TIM1_CH4
PE15/FSMC_D12/TIM1_BKIN
PB10/I2C2_SCL/USART3_TX/TIM2_CH3
PB11/I2C2_SDA/USART3_RX/TIM2_CH4
VSS_1
VDD_1
VDD_3
VSS_3
PE1/FSMC_NBL1
PE0/TIM4_ETR/FSMC_NBL0
PB9/TIM4_CH4/SDIO_D5/I2C1_SDA/CAN_TX
PB8/TIM4_CH3/SDIO_D4/I2C1_SCL/CAN_RX
BOOT0
PB7/I2C1_SDA/FSMC_NADV/TIM4_CH2/USART1_RX
PB6/I2C1_SCL/TIM4_CH1/USART1_TX
PB5/I2C1_SMBA/SPI3_MOSI/I2S3_SD/TIM3_CH2/SPI1_MOSI
PB4/NJTRST/SPI3_MISO/TIM3_CH1/SPI1_MISO
PB3/JTDO/SPI3_SCK/I2S3_CK/TRACESWO/TIM2_CH2/SPI1_SCK
PD7/FSMC_NE1/FSMC_NCE2/USART2_CK
PD6/FSMC_NWAIT/USART2_RX
PD5/FSMC_NWE/USART2_TX
PD4/FSMC_NOE/USART2_RTS
PD3/FSMC_CLK/USART2_CTS
PD2/TIM3_ETR/UART5_RX/SDIO_CMD
PD1/OSC_OUT/FSMC_D3/CAN_TX
PD0/OSC_IN/FSMC_D2/CAN_RX
PC12/UART5_TX/SDIO_CK/USART3_CK
PC11/UART4_RX/SDIO_D3/USART3_RX
PC10/UART4_TX/SDIO_D2/USART3_TX
PA15/JTDI/SPI3_NSS/I2S3_WS/TIM2_CH1_ETR/SPI1_NSS
PA14/JTCK-SWCLK
VDD_2
VSS_2
NC
PA13/JTMS-SWDIO
PA12/USART1_RTS/USB_DP/CAN_TX/TIM1_ETR
PA11/USART1_CTS/USB_DM/CAN_RX/TIM1_CH4
PA10/USART1_RX/TIM1_CH3
PA9/USART1_TX/TIM1_CH2
PA8/USART1_CK/TIM1_CH1/MCO
PC9/TIM8_CH4/SDIO_D1/TIM3_CH4
PC8/TIM8_CH3/SDIO_D0/TIM3_CH3
PC7/I2S3_MCK/TIM8_CH2/SDIO_D7/TIM3_CH2
PC6/I2S2_MCK/TIM8_CH1/SDIO_D6/TIM3_CH1
PD15/FSMC_D1/TIM4_CH4
PD14/FSMC_D0/TIM4_CH3
PD13/FSMC_A18/TIM4_CH2
PD12/FSMC_A17/TIM4_CH1/USART3_RTS
PD11/FSMC_A16/USART3_CTS
PD10/FSMC_D15/USART3_CK
PD9/FSMC_D14/USART3_RX
PD8/FSMC_D13/USART3_TX
PB15/SPI2_MOSI/I2S2_SD/TIM1_CH3N
PB14/SPI2_MISO/TIM1_CH2N/USART3_RTS
PB13/SPI2_SCK/I2S2_CK/USART3_CTS/TIM1_CH1N
PB12/SPI2_NSS/I2S2_WS/I2C2_SMBA/USART3_CK/TIM1_BKIN
5V
3.3V
GND
U2
IN
OUT
GND
EN
BYP
C1 10uF
C3 104
C4 471
C5 104
C2 10uF
P1
Header 4
SWD
SWC
POWER1
SW-SPST
5V_IN
L1
1000mA
R1 331
D1
VDD
VSS
VDDA
VSSA
R2 0
R3 0
R4 103
NRST
REST1
SW-PB
C6 104
R5 103
BOOT0
R6 103
BOOT1
B1
beep
PB8
D2
D3
R7 331
R8 331
R9 331
R10 331
R11 331
PB5
PE5
PE9
PE10
PE11
D4
5050
B
R
G
K1
K2
K3
K4
R12 103
PA0
R13 103
PE2
R15 103
PE3
R16 103
PE4
C7 104
C9 104
C10 104
C13 104
Y1
8M
OSC_IN
OSC_OUT
U5
VDD
COM
GND
COM1
COM2
COM3
C15 0R/225
C18 00R/225
P8
Header 4X2
P9
UART2_TX
UART2_RX
P2
OLED
PB4
PB6
PB7
PB8
PB9
P4
P5
Header 22X2 3.3V
U3
TJA1051
CAN_TX
CAN_RX
CAN_H
CAN_L
C8 104
R14 121
P3
Header 4X2
P6
Header 2
U4
CH340G
VCC
R232
RTS#
DTR#
DCD#
RI#
DSR#
CTS#
TXD
RXD
V3
D+
D-
XI
XO
UART1_TX
UART1_RX
USB_D+
USB_D-
C11 104
C12 106
C14 104
Y2
12M
C16 22P
C17 22P
D5
1N4148
NRST
Q1
8050
Q2
8550
R17 103
R18 102
R19 102
R20 103
BOOT0
P7
USB
SHLD
VBus
D-/DM
D+/DP
ID
5V_IN
USB_D-
USB_D+
Title
Size
A3
Number
Revision
Date: 2018/12/10
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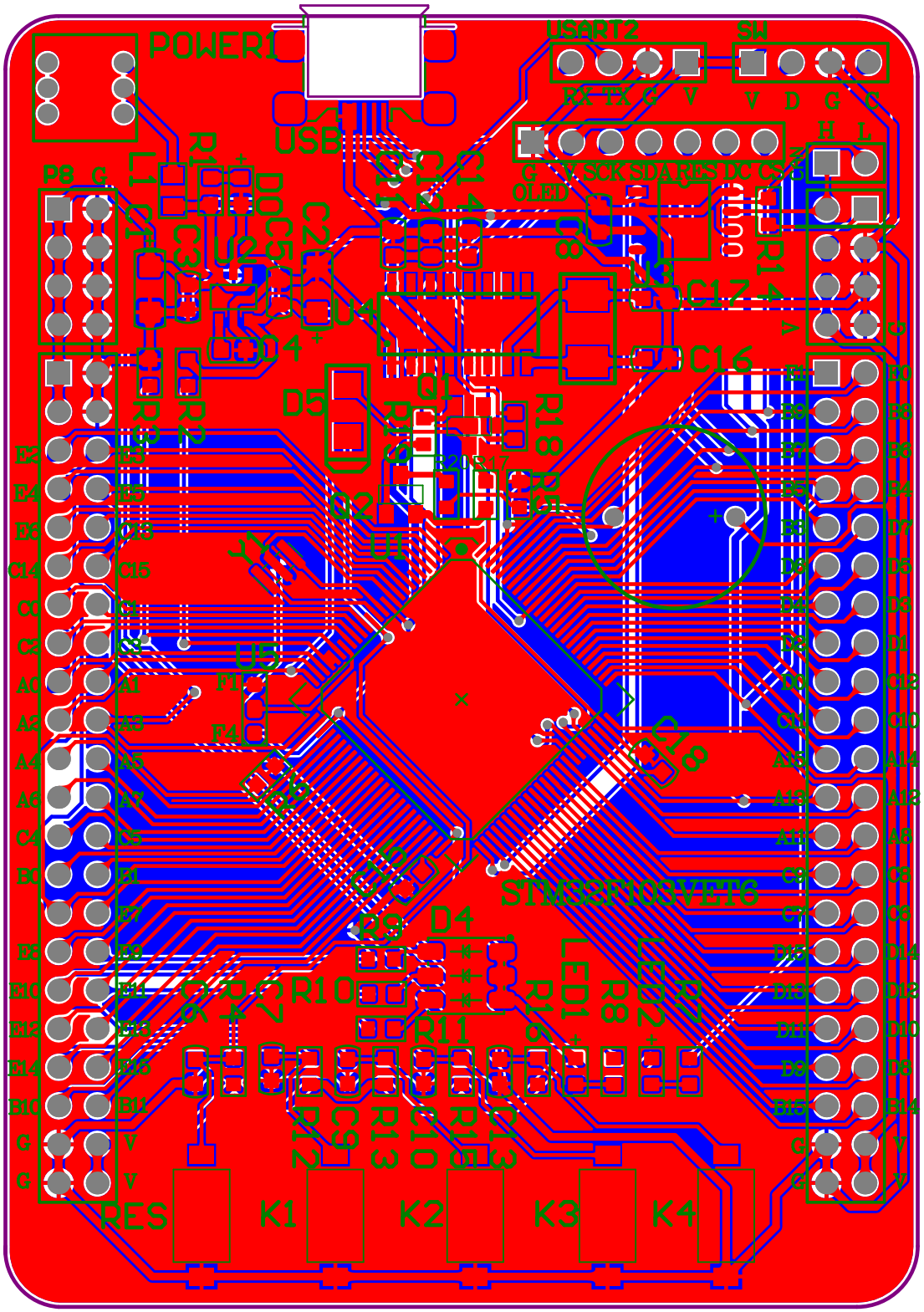
POWER1
USB
USART2
SW
OLED
RES
K1
K2
K3
K4
STM32F103VET6