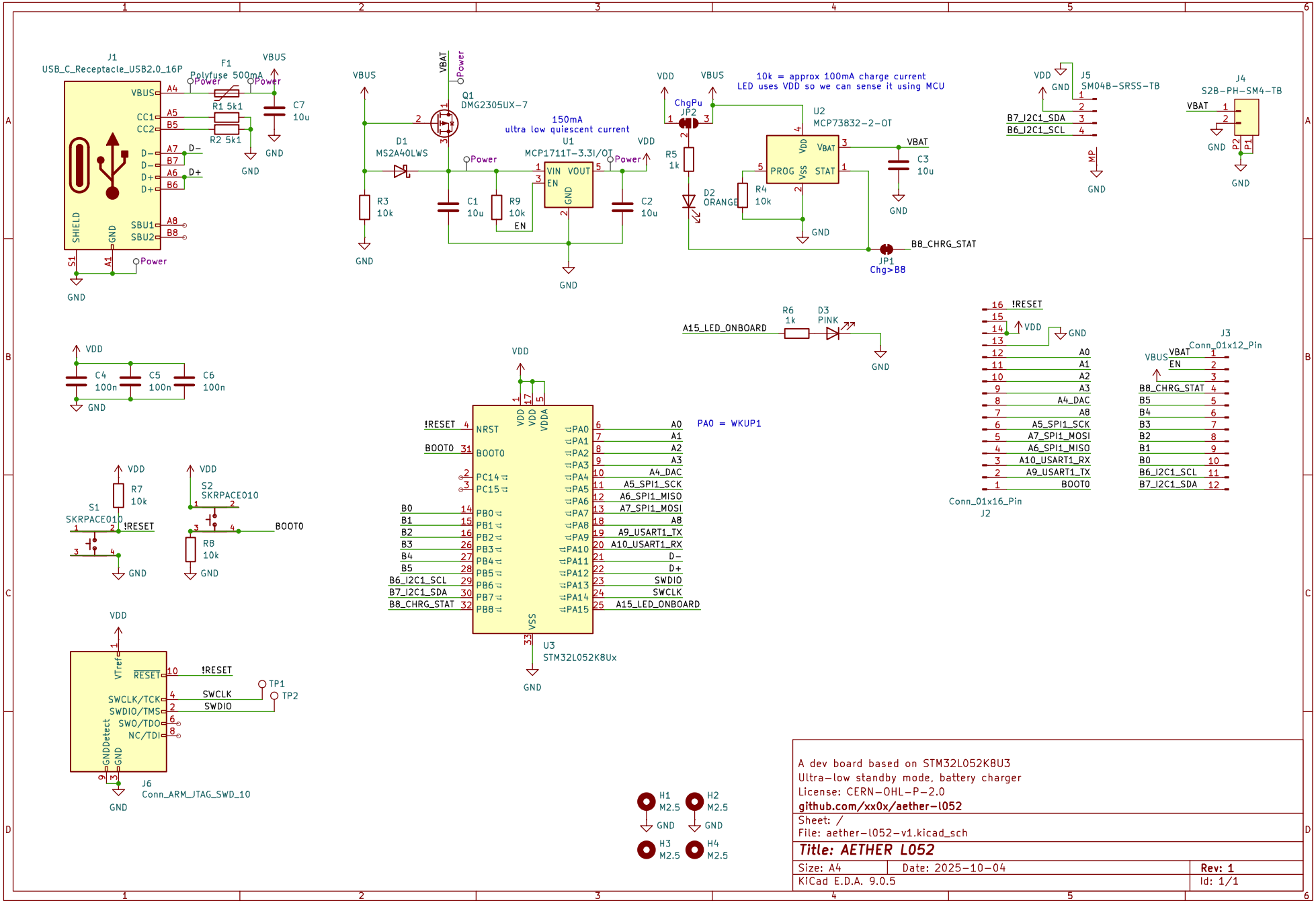
J1
USB_C_Receptacle_USB2.0_16P
F1
Polyfuse 500mA
VBUS
R1 5k1
R2 5k1
C7
10u
GND
D-
D+
SHIELD
Power
Q1
DMG2305UX-7
VBAT
D1
MS2A40LWS
R3
10k
C1
10u
R9
10k
EN
150mA
ultra low quiescent current
U1
MCP1711T-3.3I/OT
VIN
VOUT
C2
10u
VDD
10k = approx 100mA charge current
LED uses VDD so we can sense it using MCU
ChgPu
JP2
R5
1k
D2
ORANGE
U2
MCP73832-2-OT
PROG
STAT
R4
10k
C3
10u
B8_CHRG_STAT
JP1
Chg>B8
J5
SM04B-SRSS-TB
B7_I2C1_SDA
B6_I2C1_SCL
MP
J4
S2B-PH-SM4-TB
P2
P1
C4
100n
C5
100n
C6
100n
R6
1k
D3
PINK
A15_LED_ONBOARD
!RESET
BOOT0
PC14
PC15
PB0
PB1
PB2
PB3
PB4
PB5
PB6
PB7
PB8
NRST
VDDA
VSS
PA0
PA1
PA2
PA3
PA4
PA5
PA6
PA7
PA8
PA9
PA10
PA11
PA12
PA13
PA14
PA15
A0
A1
A2
A3
A4_DAC
A5_SPI1_SCK
A6_SPI1_MISO
A7_SPI1_MOSI
A8
A9_USART1_TX
A10_USART1_RX
D-
D+
SWDIO
SWCLK
A15_LED_ONBOARD
PA0 = WKUP1
U3
STM32L052K8Ux
R7
10k
S1
SKRPACE010
S2
SKRPACE010
R8
10k
Conn_01x16_Pin
J2
J3
Conn_01x12_Pin
VBAT
EN
B8_CHRG_STAT
B5
B4
B3
B2
B1
B0
B6_I2C1_SCL
B7_I2C1_SDA
VTref
RESET
SWCLK/TCK
SWDIO/TMS
SWO/TDO
NC/TDI
GNDDetect
TP1
TP2
J6
Conn_ARM_JTAG_SWD_10
H1
M2.5
H2
M2.5
H3
M2.5
H4
M2.5
A dev board based on STM32L052K8U3
Ultra-low standby mode, battery charger
License: CERN-OHL-P-2.0
github.com/xx0x/aether-l052
Sheet: /
File: aether-l052-v1.kicad_sch
Title: AETHER L052
Size: A4
Date: 2025-10-04
Rev: 1
KiCad E.D.A. 9.0.5
Id: 1/1