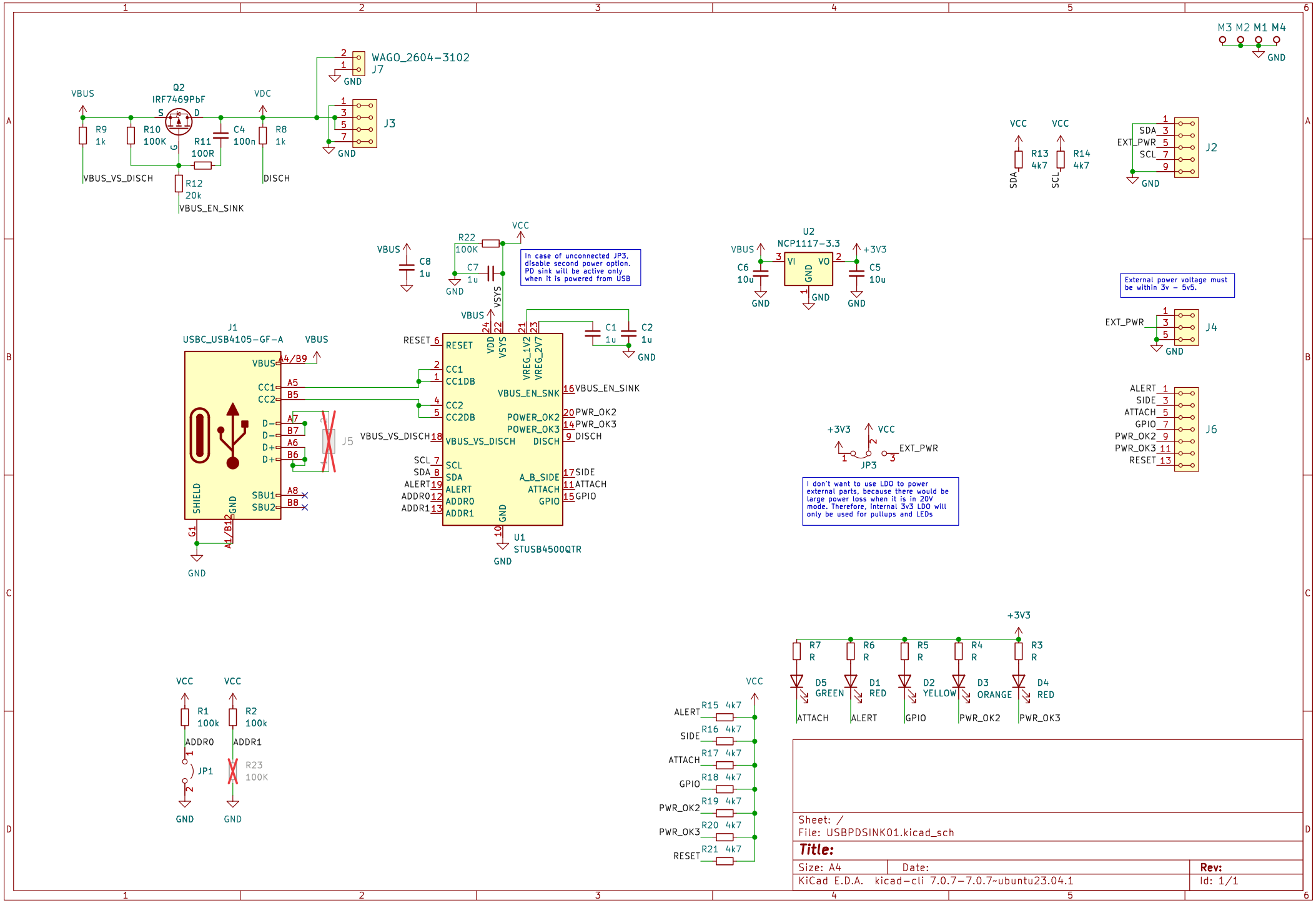
M3 M2 M1 M4
GND
WAGO_2604-3102
J7
VBUS
Q2
IRF7469PbF
VDC
R9
1k
R10
100K
R11
100R
C4
100n
R8
1k
J3
VBUS_VS_DISCH
R12
20k
VBUS_EN_SINK
DISCH
VCC
R13
4k7
R14
4k7
SDA
SCL
EXT_PWR
J2
R22
100K
C7
1u
C8
1u
In case of unconnected JP3, disable second power option. PD sink will be active only when it is powered from USB
VSYS
U2
NCP1117-3.3
C6
10u
C5
10u
+3V3
External power voltage must be within 3v – 5v5.
J4
J1
USBC_USB4105-GF-A
J5
RESET
C1
1u
C2
1u
VBUS_EN_SINK
POWER_OK2
POWER_OK3
VBUS_VS_DISCH
SIDE
ATTACH
GPIO
ADDR0
ADDR1
U1
STUSB4500QTR
JP3
I don't want to use LDO to power external parts, because there would be large power loss when it is in 20V mode. Therefore, internal 3v3 LDO will only be used for pullups and LEDs
J6
R1
100k
R2
100k
JP1
R23
100K
R15 4k7
R16 4k7
R17 4k7
R18 4k7
R19 4k7
R20 4k7
R21 4k7
R7
R
R6
R
R5
R
R4
R
R3
R
D5
GREEN
D1
RED
D2
YELLOW
D3
ORANGE
D4
RED
Sheet: /
File: USBPDSINK01.kicad_sch
Title:
Size: A4
Date:
Rev:
KiCad E.D.A. kicad-cli 7.0.7-7.0.7~ubuntu23.04.1
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