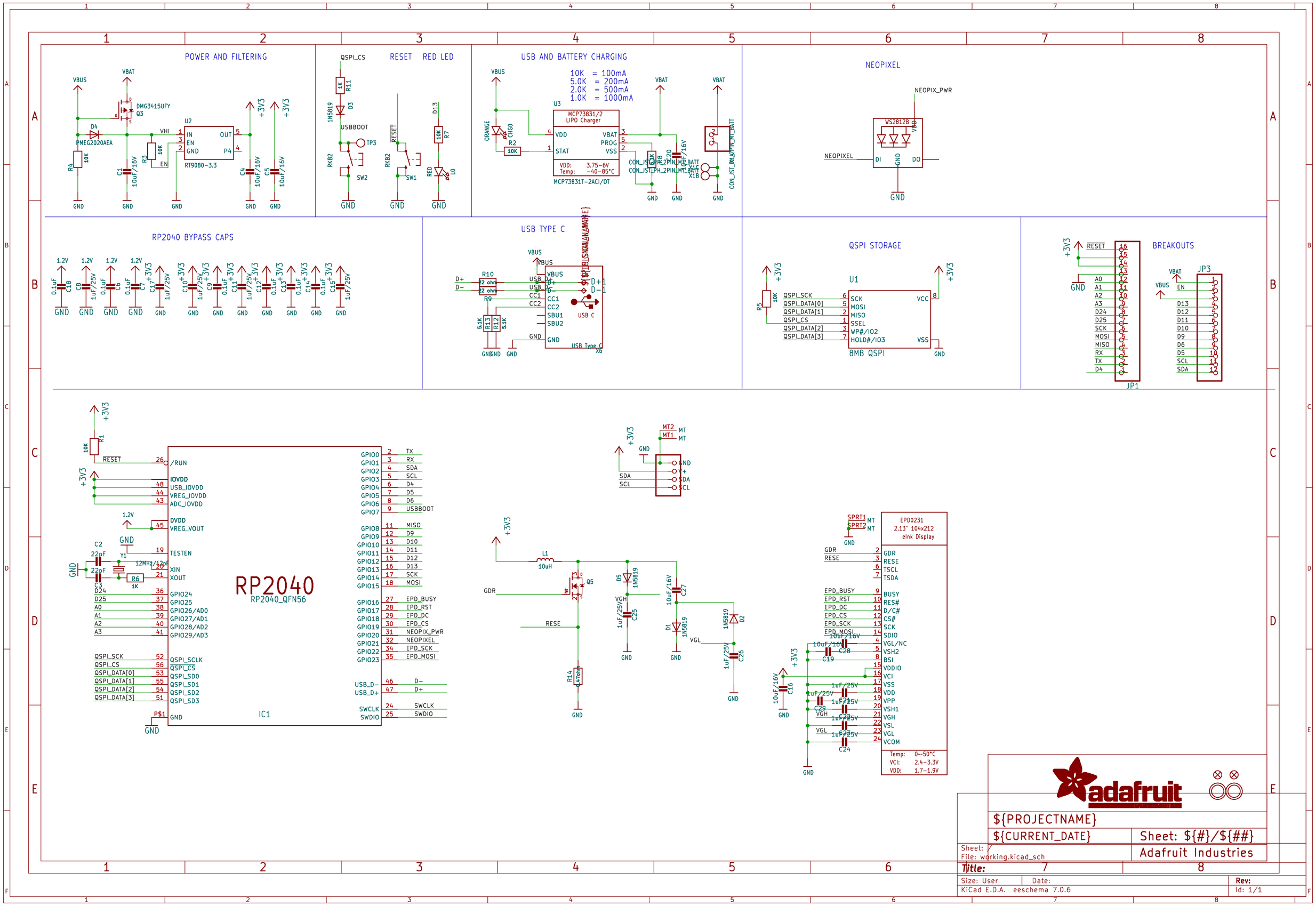
POWER AND FILTERING
VBUS
VBAT
DMG3415UFY
Q3
D4
PMEG2020AEA
R4 10K
C1 10uF/16V
R3 10K
EN
VHI
U2
IN
EN
GND
OUT
P4
RT9080-3.3
C4 10uF/16V
C5 10uF/16V
+3V3
GND
QSPI_CS
RESET
RED LED
R11 1K
1N5819
D3
USBBOOT
TP3
RKB2
SW2
SW1
D13
R7 10K
RED
LO
USB AND BATTERY CHARGING
10K = 100mA
5.0K = 200mA
2.0K = 500mA
1.0K = 1000mA
U3
MCP73831/2
LIPO Charger
VDD
STAT
VBAT
PROG
VSS
VDD: 3.75-6V
Temp: -40-85°C
MCP73831T-2ACI/OT
ORANGE
CHGO
R2 10K
R8 5.1K
C7 10uF/16V
CON_JST_PH_2PIN_MT_BATT
X1B
NEOPIXEL
NEOPIX_PWR
WS2812B
VDD
DI
GND
DO
RP2040 BYPASS CAPS
1.2V
C18 0.1uF
C8 1uF/25V
C6 0.1uF
C7 1uF/25V
C10 1uF/25V
C9 0.1uF
C11 1uF/25V
C12 0.1uF
C13 0.1uF
C14 0.1uF
C15 1uF/25V
USB TYPE C
R10 22 ohm
R9 22 ohm
R13 5.1K
R12 5.1K
USB C
USB Type C
X6
QSPI STORAGE
U1
R5 10K
QSPI_SCK
QSPI_DATA[0]
QSPI_DATA[1]
QSPI_CS
QSPI_DATA[2]
QSPI_DATA[3]
SCK
MOSI
MISO
SSEL
WP#/IO2
HOLD#/IO3
VCC
VSS
8MB QSPI
BREAKOUTS
JP1
JP3
RESET
A0
A1
A2
A3
D24
D25
SCK
MOSI
MISO
RX
TX
D4
EN
D13
D12
D11
D10
D9
D6
D5
SCL
SDA
R1 10K
/RUN
IOVDD
USB_IOVDD
VREG_IOVDD
ADC_IOVDD
DVDD
VREG_VOUT
TESTEN
XIN
XOUT
C2 22pF
C3 22pF
Y1 12MHz
R6 1K
GPIO24
GPIO25
GPIO26/AD0
GPIO27/AD1
GPIO28/AD2
GPIO29/AD3
QSPI_SCLK
QSPI_SD0
QSPI_SD1
QSPI_SD2
QSPI_SD3
P$1
RP2040
RP2040_QFN56
IC1
GPIO0 TX
GPIO1 RX
GPIO2 SDA
GPIO3 SCL
GPIO4 D4
GPIO5 D5
GPIO6 D6
GPIO7 USBBOOT
GPIO8 MISO
GPIO9 D9
GPIO10 D10
GPIO11 D11
GPIO12 D12
GPIO13 D13
GPIO14 SCK
GPIO15 MOSI
GPIO16 EPD_BUSY
GPIO17 EPD_RST
GPIO18 EPD_DC
GPIO19 EPD_CS
GPIO20 NEOPIX_PWR
GPIO21 NEOPIXEL
GPIO22 EPD_SCK
GPIO23 EPD_MOSI
USB_D- D-
USB_D+ D+
SWCLK
SWDIO
MT2 MT
MT1 MT
L1 10uH
Q5
GDR
RESE
R14 0.470uH
D5 1N5819
VGH
C25 1uF/25V
C27 10uF/16V
D1 1N5819
D2 1N5819
VGL
C26 1uF/25V
SPRT1 MT
SPRT2 MT
EPD0231
2.13" 104x212
eink Display
GDR
RESE
TSCL
TSDA
EPD_BUSY
EPD_RST
EPD_DC
EPD_CS
EPD_SCK
EPD_MOSI
BUSY
RES#
D/C#
CS#
SCK
SDIO
VGL/NC
VSH2
BSI
VDDIO
VCI
VSS
VDD
VPP
VSH1
VGH
VSL
VGL
VCOM
C19 10uF/16V
C28 10uF/16V
C16 10uF/16V
C29 1uF/25V
C24 1uF/25V
Temp: 0--50°C
VCI: 2.4-3.3V
VDD: 1.7-1.9V
adafruit
${PROJECTNAME}
${CURRENT_DATE}
Sheet: ${#}/${##}
Sheet: /
File: working.kicad_sch
Adafruit Industries
Title:
Size: User
Date:
Rev:
KiCad E.D.A. eeschema 7.0.6
Id: 1/1