

USB Connector

USB-C



File: USB-C.kicad_sch

Microcontroller

MCU-ATmega32u4



File: MCU-ATmega32u4.kicad_sch

Device specific matrices

Key_Matrix



File: Key_Matrix.kicad_sch

MH1
MountingHole
MH2
MountingHole
MH3
MountingHole
MH4
MountingHole
MH5
MountingHole

MH6
MountingHole
MH7
MountingHole
MH8
MountingHole
MH9
MountingHole
MH10
MountingHole

MH11
MountingHole
MH12
MountingHole
MH13
MountingHole
MH14
MountingHole
MH15
MountingHole

MH16
MountingHole
MH17
MountingHole
MH18
MountingHole
MH19
MountingHole

Sheet: /
File: atreus.kicad_sch

Title:

Size: User

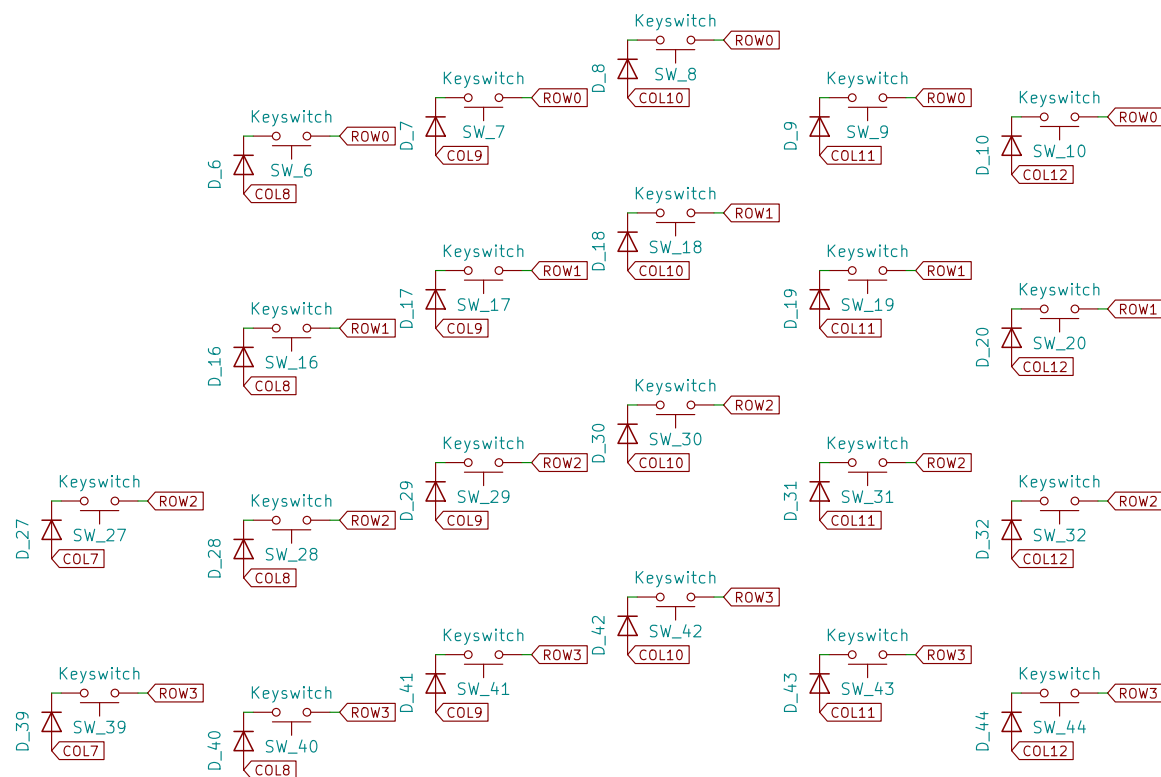
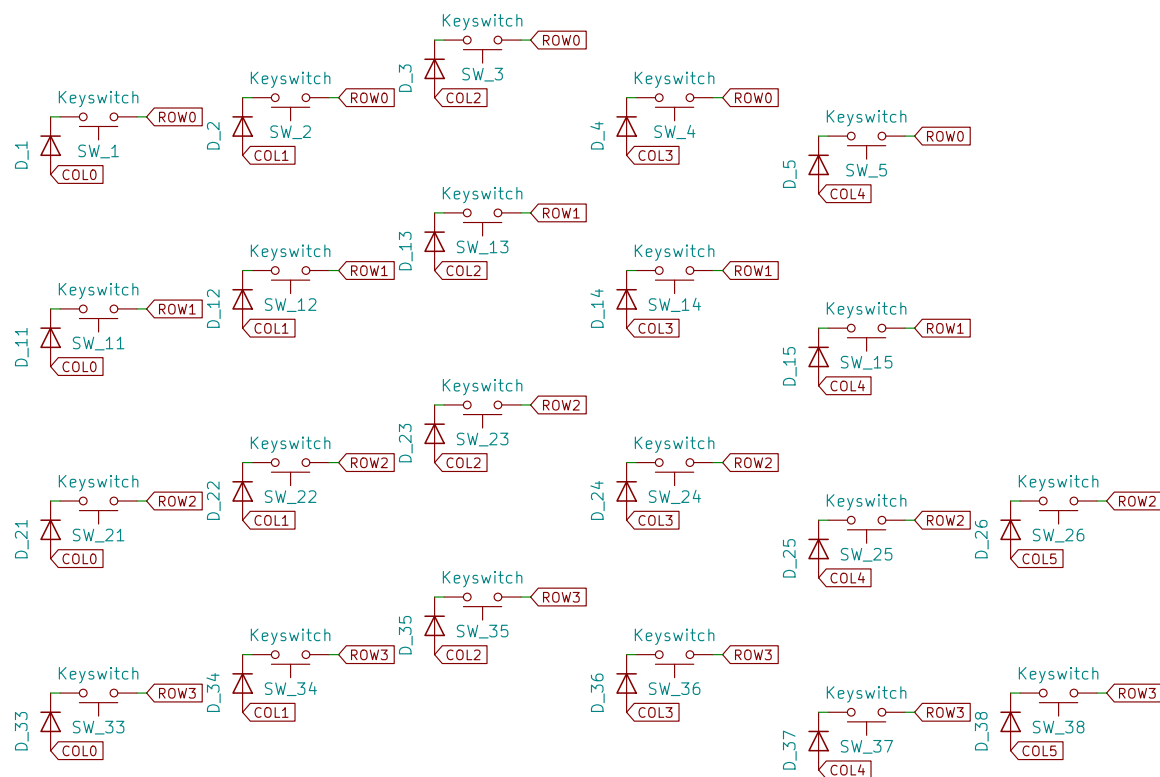
Date: 2018-09-05

Rev:

KiCad E.D.A. kicad (6.0.0-0)

Id: 1/5

Key Matrix



Sheet: /Key_Matrix/
File: Key_Matrix.kicad_sch

Title:

Size: A3

Date:

KiCad E.D.A. kicad (6.0.0-0)

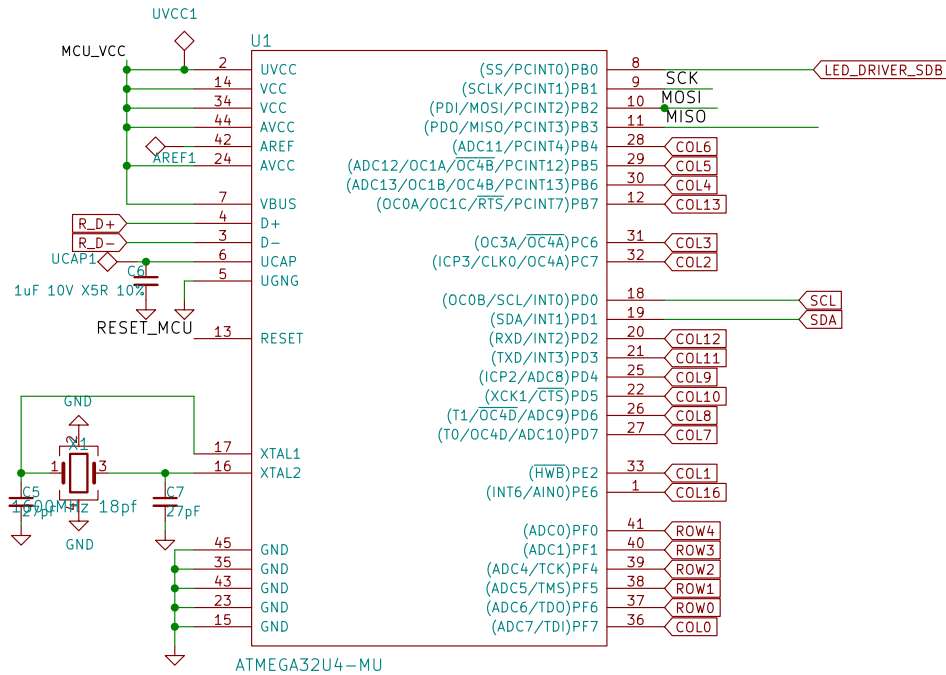
Rev:

Id: 2/5

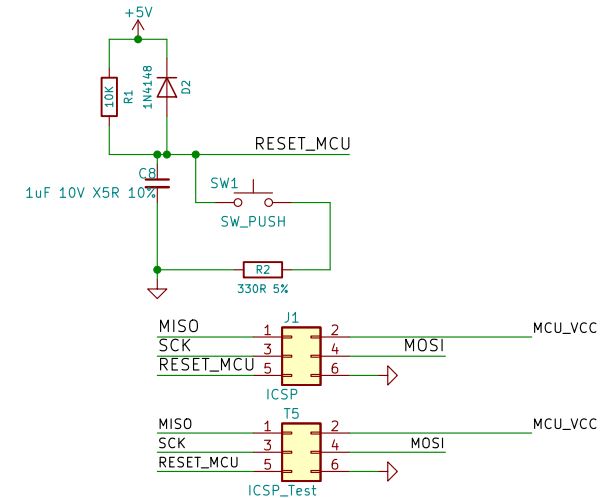
Input

5V
+ ← MCU_VCC

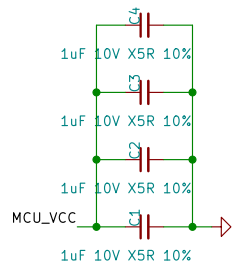
Primary Microcontroller



MCU Programming



Place close to 2xVCC,
2x AVCC pins.



Keyboardio

Sheet: /MCU-ATmega32u4/
File: MCU-ATmega32u4.kicad_sch

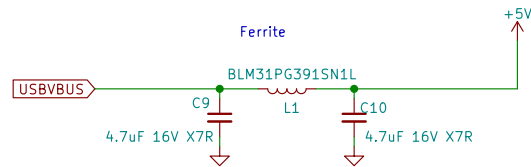
Title: MCU

Size: A4
KiCad E.D.A. kicad (6.0.0-0)

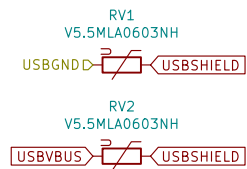
Date: 2016-05-06

Rev:
Id: 3/5

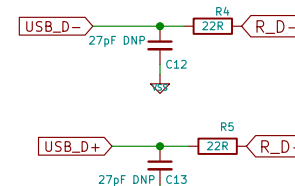
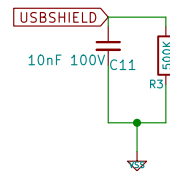
General purpose USB protection & support circuitry



USB Over-voltage protection



RC filter, so the cable doesn't become an antenna



Optional slew rate limiting capacitors if needed to pass EMI testing

Keyboardio

Sheet: /USB-C/USB Support/
File: USB-Support.kicad_sch

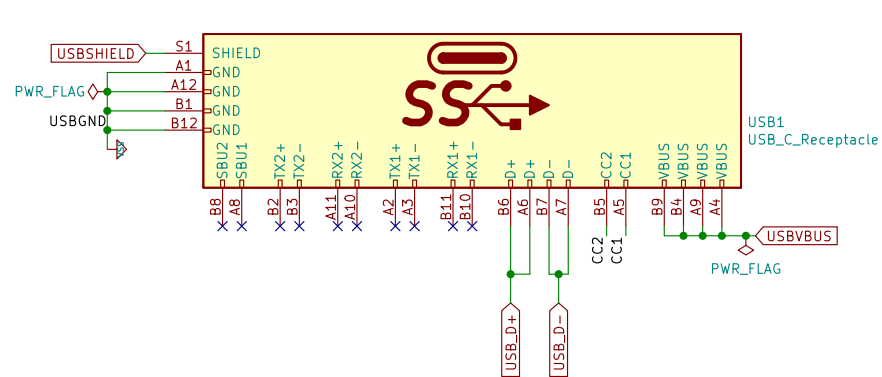
Title:

Size: A4 Date: 2016-05-06
KiCad E.D.A. kicad (6.0.0-0)

Rev:
Id: 4/5

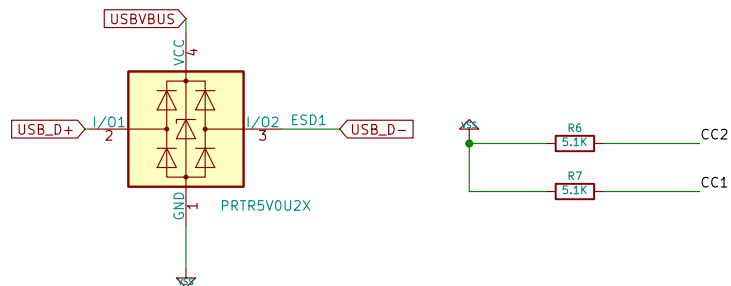
USB Type C Mid Connector

USB Support Circuitry



USB Support
USBGND USBGND
File: USB-Support.kicad_sch

USB ESD Protection



Keyboardio

Sheet: /USB-C/
File: USB-C.kicad_sch

Title:

Size: A4
KiCad E.D.A. kicad (6.0.0-0)

Date: 2016-05-06

Rev:
Id: 5/5