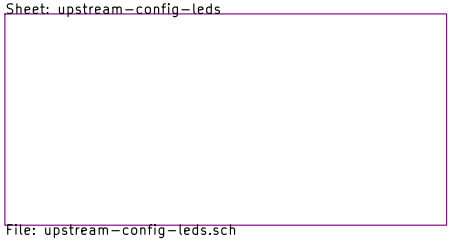
If you think this sheet is boring, take it up with ANTTO!

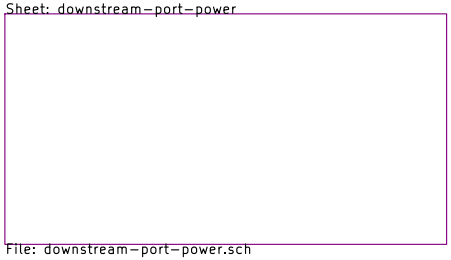
Sheet: upstream-config-leds



File: upstream-config-leds.sch

Feeling uppitty, into configuration and the world at large?

Sheet: downstream-port-power



File: downstream-port-power.sch

Feeling down, feeling like power switching and chunks of metal?

one up, one down
three double ports for discos w/ user usb
intended for controlling libopencm3 regression test boards

Sheet: /
File: usb-test-harness.sch

Title: Cascading per port controllable USB hub

Size: A4	Date: 2019-12-03	**Rev:**
KiCad E.D.A. kicad 5.99.0-unknown-r17398-a8d9fcb4		Id: 1/3

usb A MALE for plugging directly into an upstream
+
usb b micro for cable connecting as top level

J?
USB_A (male up)

J?
USB_B_Micro (up)

sheeet, could even use on of those new usb-c with only USB2 pins on it here option ALLLL the things

CFG straps
011: EEPROM
101: defaults+dyn+led=usb
100: defaults+dyn ?

If EEPROM

If default

Connect for EEP programming (holds hub in reset)

Near CDD33CR (24)

U?A
USB2517

USB Speed indication leds _only_
(They seem more useful than USB standard leds)

Programming header for EEPROM
J?
Conn_01x03_Male

U?
FT24C02A

Optional, pin straps cover everything but usb device serial!

Screw terminals for 5-12V input?
Jumper for whether to use a regulator or just expect perfect 5V input?

Need as much as 460mA at 3.3V for 7xHS ports enabled!

U?
MIC5504-3.3YM5

TODO

* shields/ground connections for all
* 460mA@3.3V for hub. (buck from 5v?)
* 12V to 5V buck, capable of 7*1A @ 5V ?!!

Sheet: /upstream-config-leds/		
File: upstream-config-leds.sch		
Title:		
Size: A3	Date:	**Rev:**
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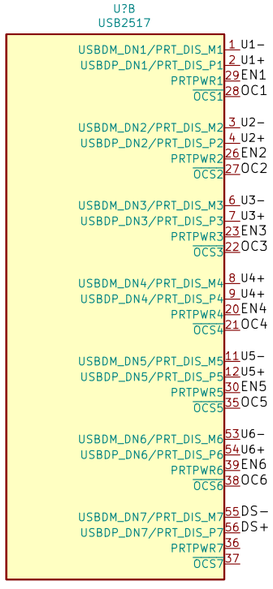
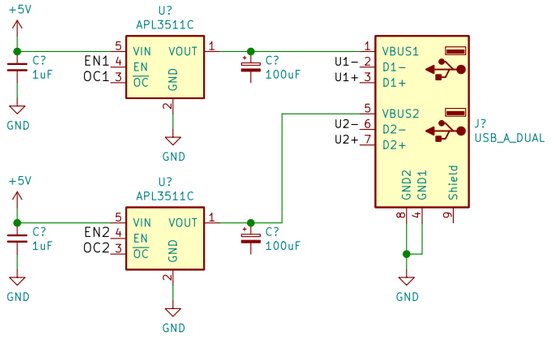
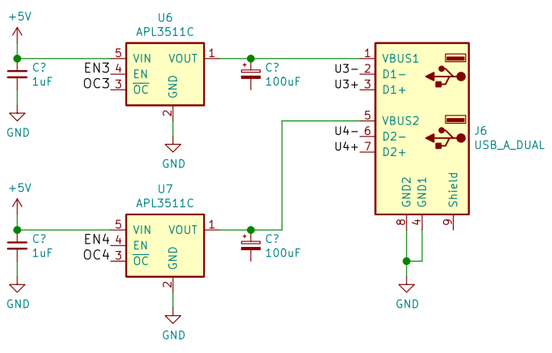
APL3511C is 1A, if you want more power, APL3511A is 2A limited

Remember: Some nice big bulk caps per port!

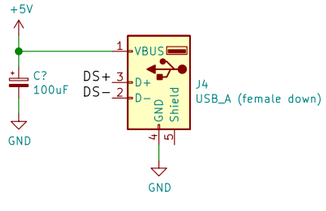






Each pair a Double stack USB port
C12049 on lcsc or similar

Downstream port for cascading to another hub



Sheet: /downstream−port−power/
File: downstream−port−power.sch

Title:

Size: A3	Date:	**Rev:**
KiCad E.D.A. kicad 5.99.0−unknown−r17398−a8d9fcb4		Id: 3/3