

A

A

B

B

C

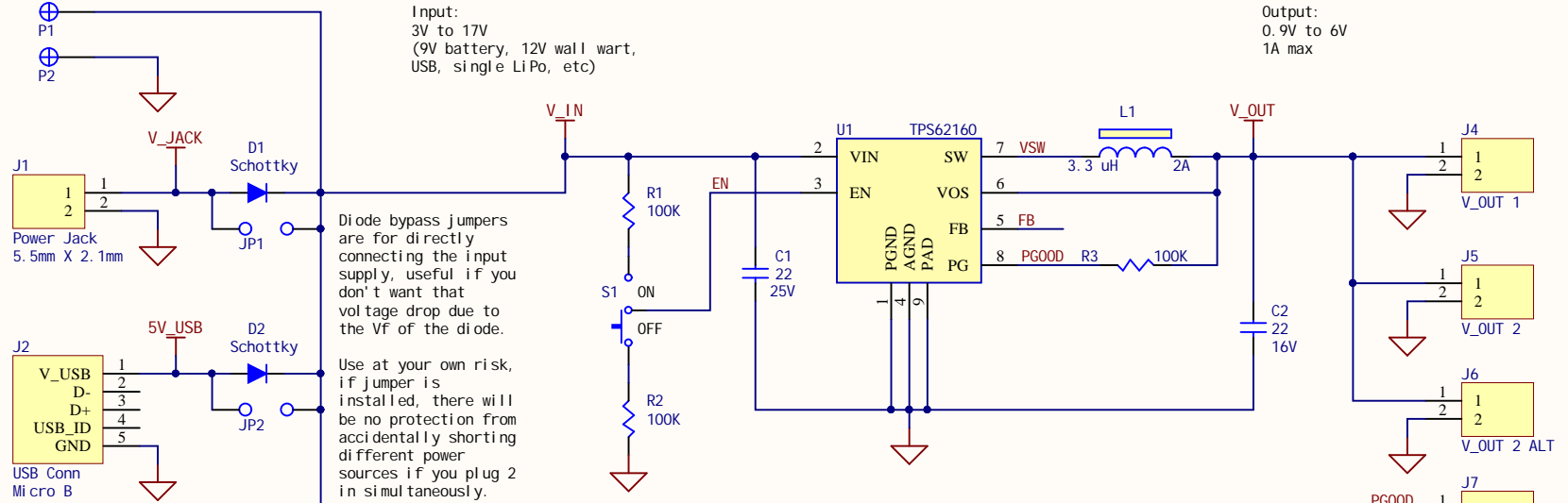
C

D

D

Input:  
3V to 17V  
(9V battery, 12V wall wart,  
USB, single LiPo, etc)

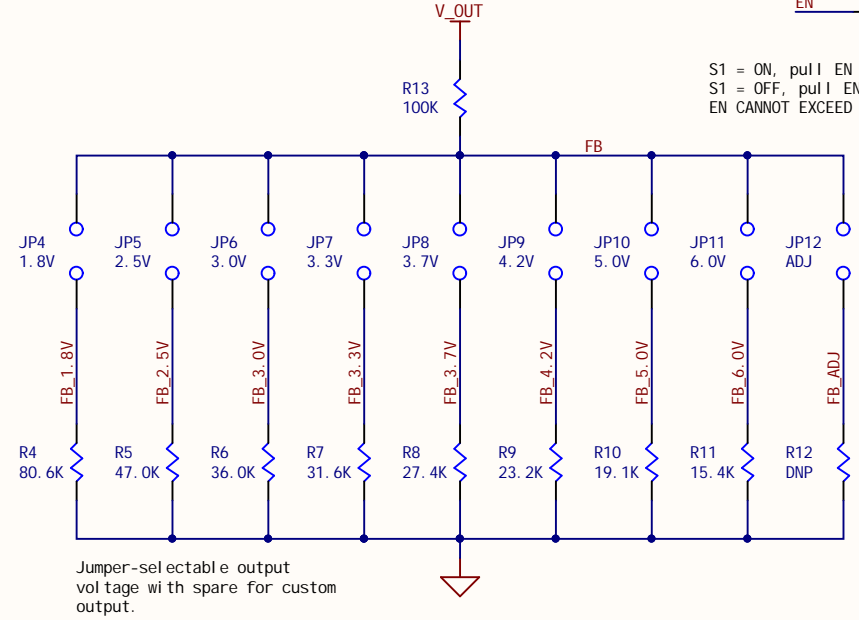
Output:  
0.9V to 6V  
1A max



Diode bypass jumpers are for directly connecting the input supply, useful if you don't want that voltage drop due to the Vf of the diode.

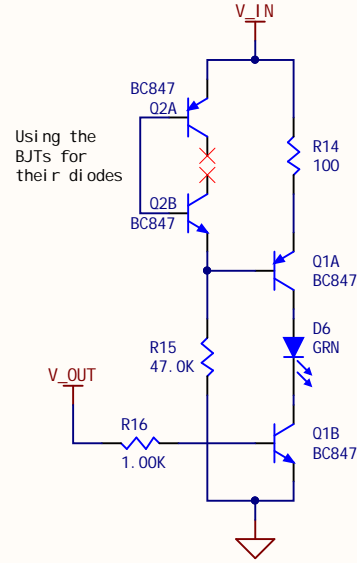
Use at your own risk, if jumper is installed, there will be no protection from accidentally shorting different power sources if you plug 2 in simultaneously.

S1 = ON, pull EN low to shut off  
S1 = OFF, pull EN high to turn on  
EN CANNOT EXCEED VIN



Jumper-selectable output voltage with spare for custom output.

$$R_{top} = R_{bot} * (V_{out}/0.8 - 1)$$



Using the BJTs for their diodes

Constant current to LED even at low V\_IN

Title		
The Switch Trick		
Size	Number	Revision
A		B
Date:	7/28/2019	Sheet of
File:	C:\Users\...\SwitchTrickB.SchDoc	Drawn By: SUNDRA