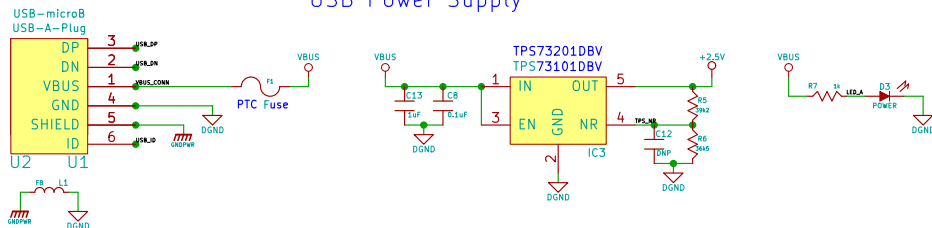
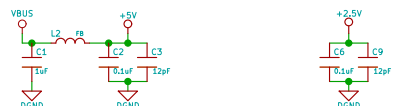


USB Power Supply



Oscillator



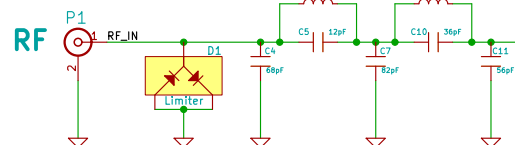
Attenuate LO to +13dB

The buffer gate acts as a saturated amplifier to reduce amplitude noise in the LO signal.

A 74LVC1G125 buffer must be powered at 2.5V for it to handle a 100MHz+ signal.

Elliptic Lowpass Filter

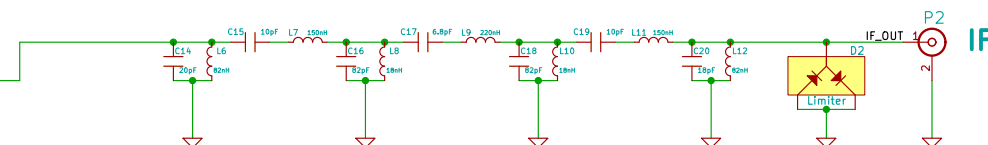
<0.3dB ripple below 46MHz
<1.5dB ripple below 67MHz
-3dB cutoff at 69MHz
>40dB attenuation at >88MHz



LO Level = +13dB

Butterworth Bandpass Filter

Minimum -1dB outside 102MHz to 168MHz
Minimum -3dB outside 100MHz to 171MHz
Minimum -30dB outside 85MHz to 198MHz



For more information visit www.opendous.org/Upconverter
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File: Upconverter-100MHz-13LO-SMS3926-CX2147.sch

Sheet: /

Title: Upconverter-100MHz-13LO-SMS3926-CX2147

Size: A4

Date: 23 jul 2012

Rev: 1.0

KiCad E.D.A.

Id: 1/1