

Place 100nF and 10nF caps on all power pin groups here

0 Ohm resistors are to disconnect highest antenna traces to prevent noise when ENV2810 part is not loaded

10th order Chebyshev 30MHz Low-pass filter
30MHz cutoff, Zero 150kHz, 0.2dB ripple, 7 components, configured to symmetrical.
The actual values for capacitors are 47/2pF, 82/2pF, 82/2pF and 47/2pF.
However, to have steeper slope at 30MHz cutoff (and, conveniently, a +1dB increase just before the cutoff point) the actual values of 33pF, 39pF, 39pF and 33pF are used. As a result the filter has 1.4dB overall ripple.
Calculator at
<http://www.calculator.com/electronics/cf620p9820low%30pass.htm>

Resulting output impedance is 150ohm both sides

Do not place planes or traces under the filter components!

Inductors: Farnell 159-8443/8444 (pg.1276)

NOTE: 400 ohm resistors are 715+910 ohm on top of each other, resulting 400.4 ohm

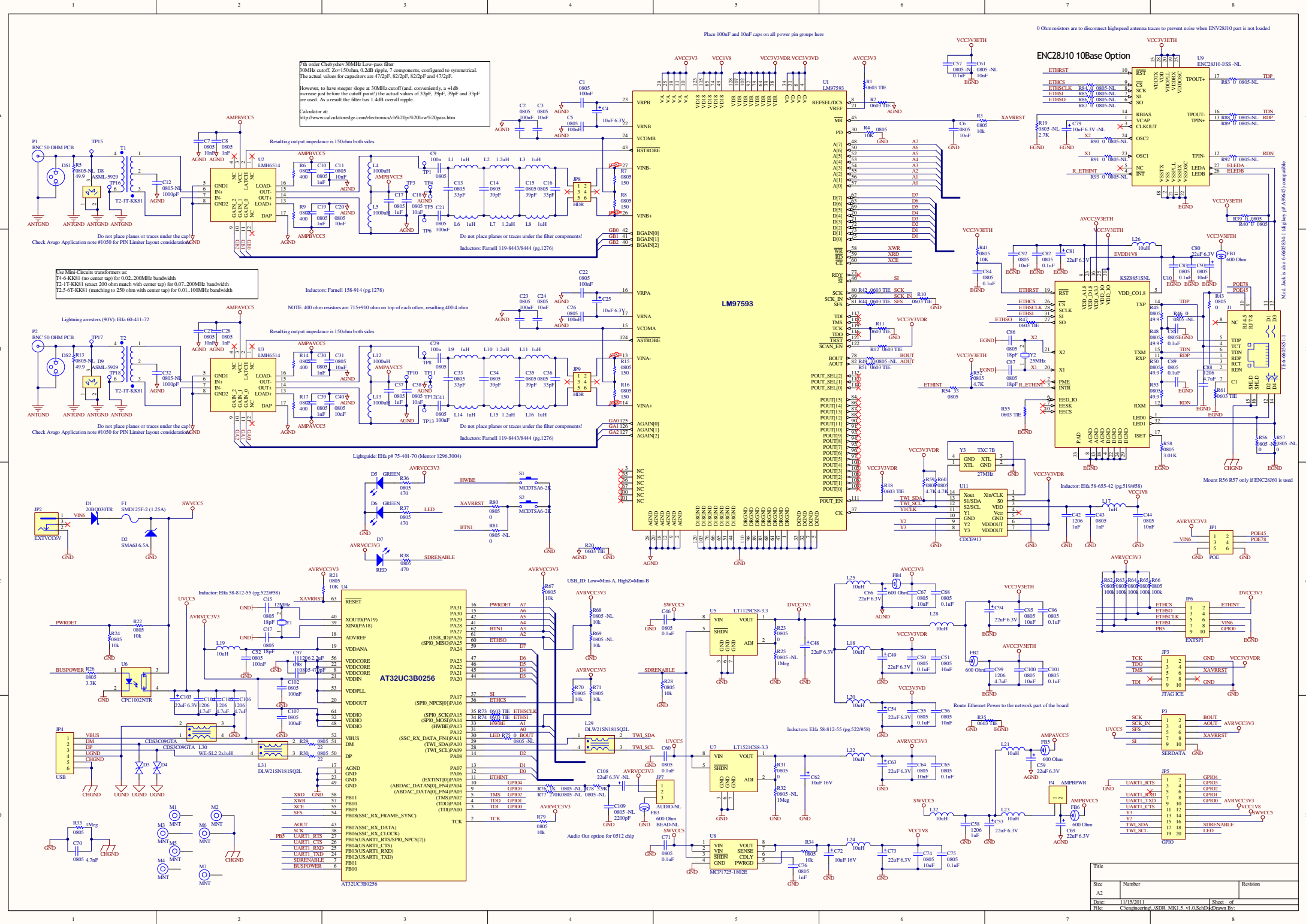
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Inductors: Farnell 119-8443/8444 (pg.1276)

Lightguide: Elica p/n 75-401-70 (Mentor 1296.3004)

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