

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

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

1st order Chebyshev 30MHz Low-pass filter  
30MHz cutoff, Z=150ohm, 0.2dB ripple, 7 components, configured to symmetrical.  
The actual values for capacitors are 472pF, 822pF, 822pF and 472pF.

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 a 1.4dB overall ripple.

Calculator at  
<http://www.calculator.net/electronics/circuit/20p/20low/30pass.htm>

Resulting output impedance is 150ohm both sides

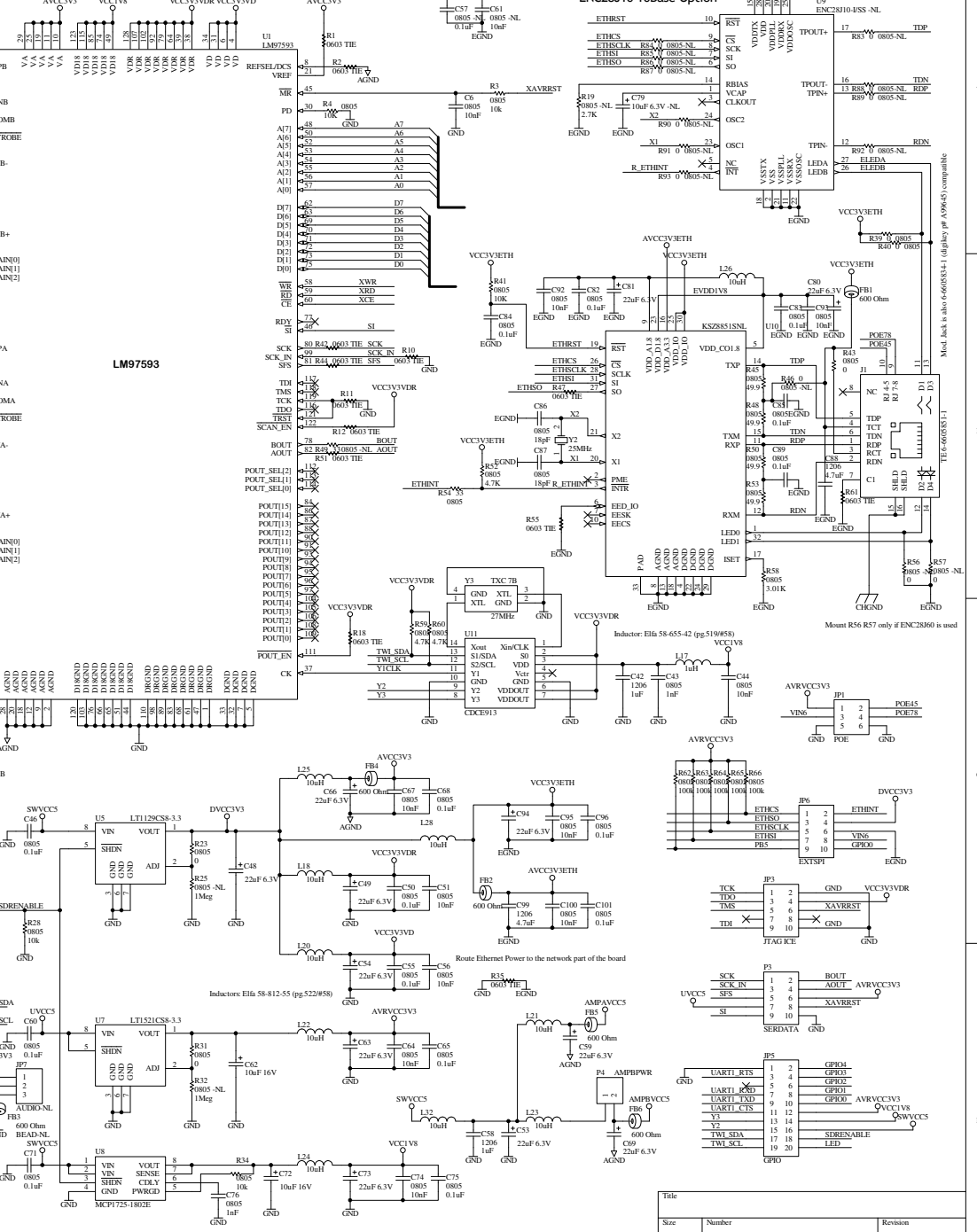
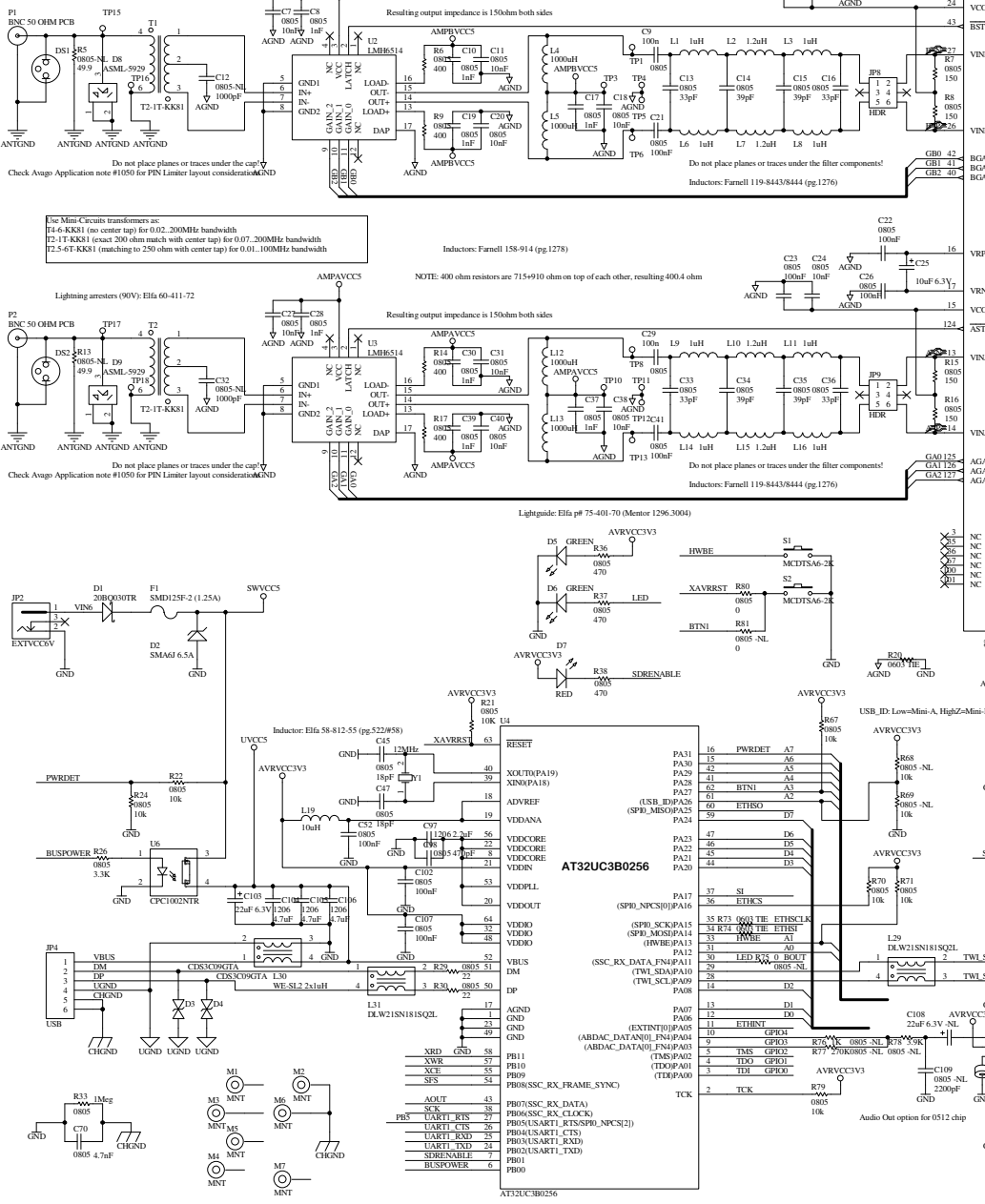
Do not place planes or traces under the filter components!

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

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

Lightstage: Eifa p# 75-401-70 (Mentor 1296.3004)

AT32UC3B0256



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