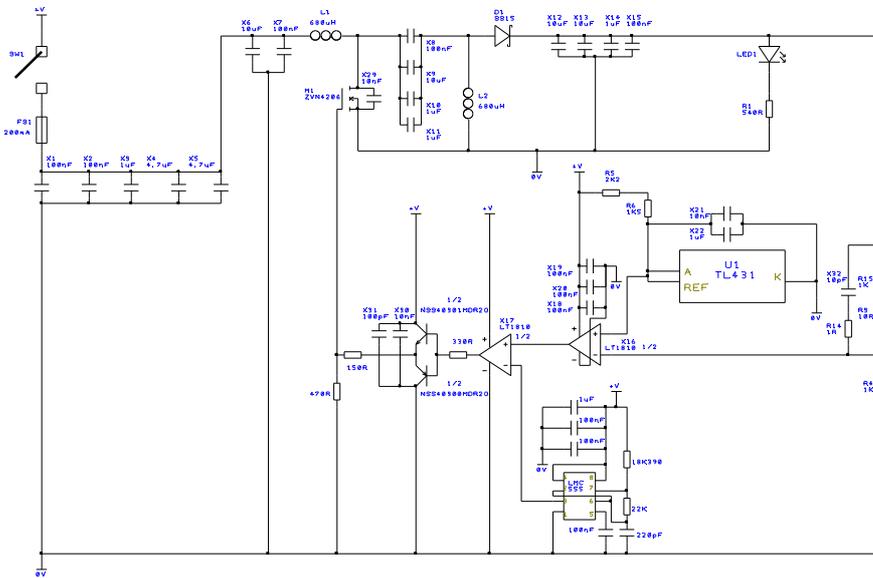


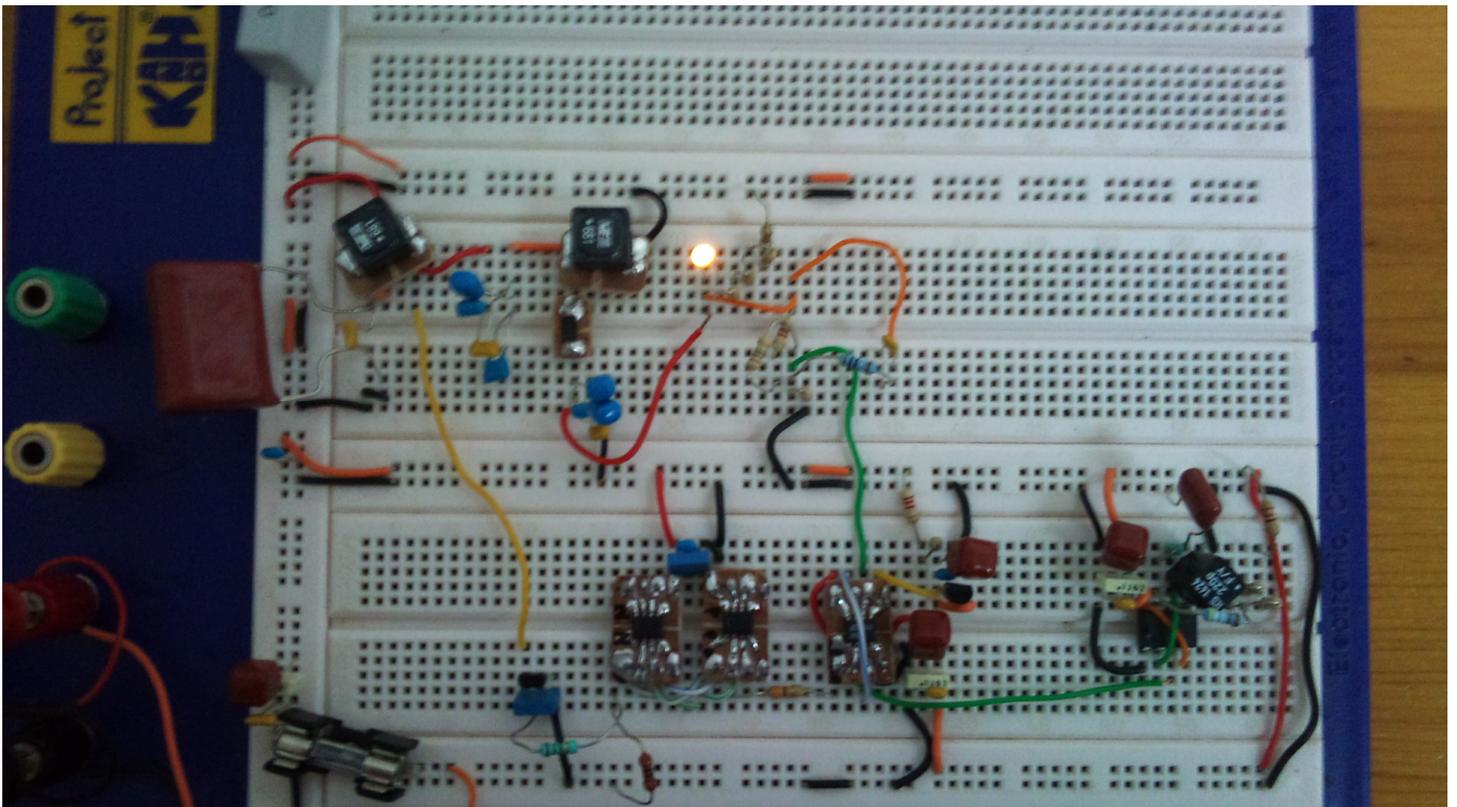
90kHz calculations (Based on: "Designing A SEPIC Converter" snva168e):

- $D_{min} = 46\%$
- $D_{max} = 52\%$
- $I_{L1} = 42\text{mA}$
- $L1, L2 = 667\mu\text{H}$
- $I_{L1(\text{peak})} = 131\text{mA}$
- $I_{L2(\text{peak})} = 120\text{mA}$
- $I_{Q1(\text{peak})} = 251\text{mA}$
- $I_{Q1(\text{rms})} = 151\text{mA}$
- $PD_{Q1}: I_G = 33\text{mA}$
- $PD_{Q1} = 3\text{mW}$
- $V_{Rd1} = 11\text{V}$
- $PD_{d1} = 22\text{mW}$
- $I_{Cs(\text{rms})} = 104\text{mA}$
- $\text{Diff}_{V_{Cs}} = 28\text{mV}$
- $I_{Cout(\text{rms})} = 104\text{mA}$
- $\text{ESR} \leq 100\text{m}\Omega$
- $C_{out} \geq 21\mu\text{F}$
- $I_{Cin(\text{rms})} = 12\text{mA}$

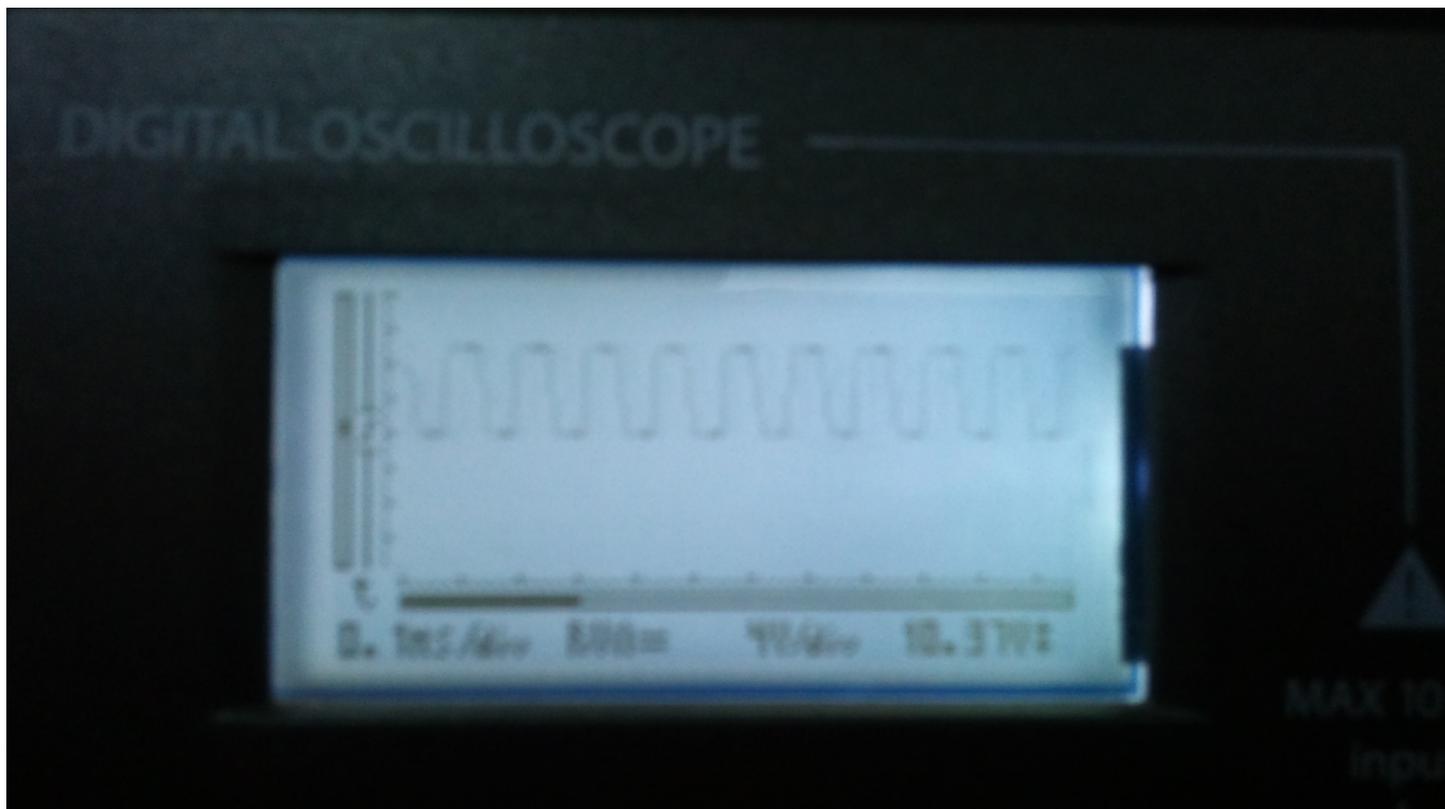
90kHz SEPIC schematic:



90kHz breadboard:



This is my hi-tech oscilloscope:



How I am measuring with osc probe:

