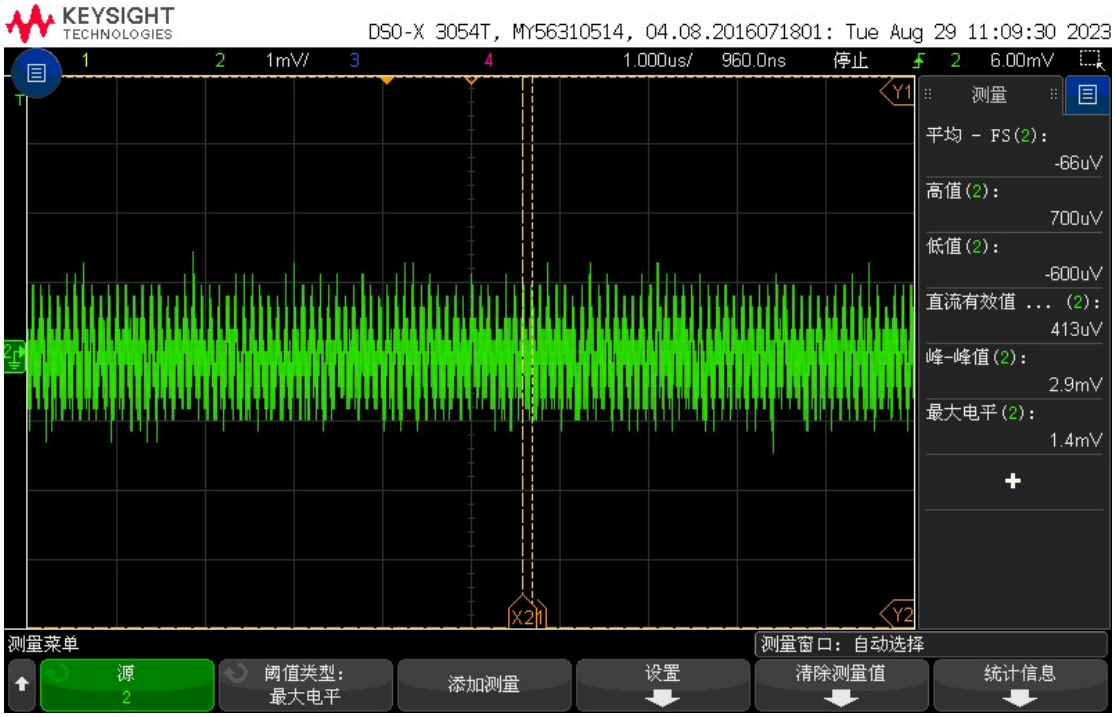
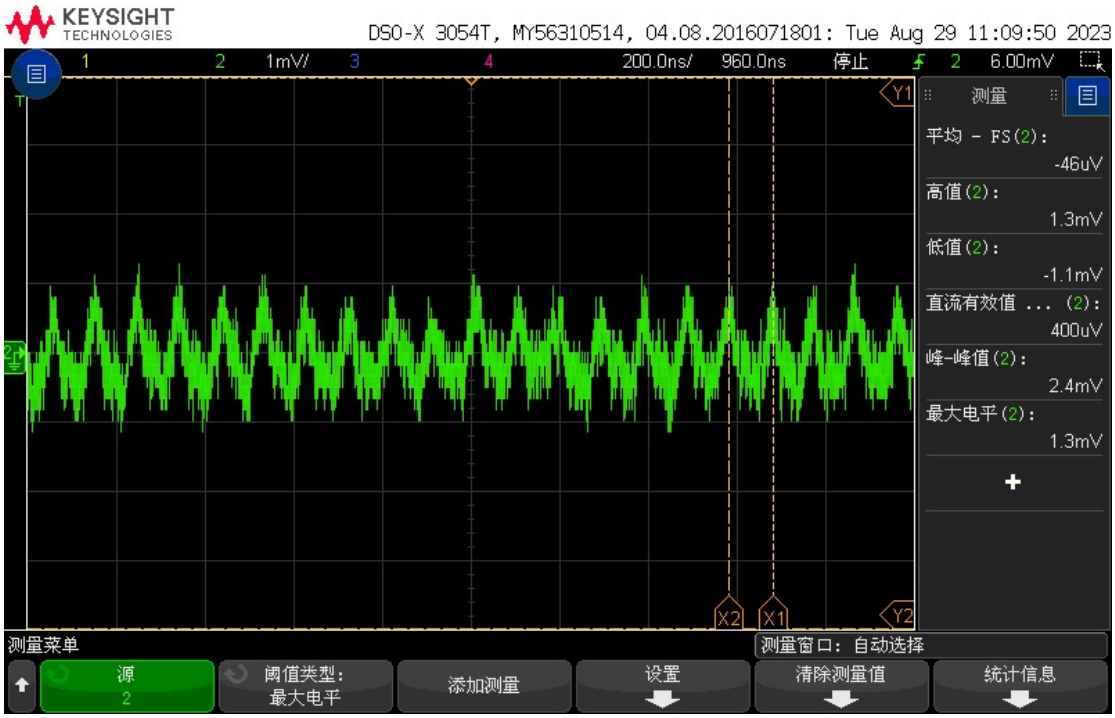
OPA365 test waveforms

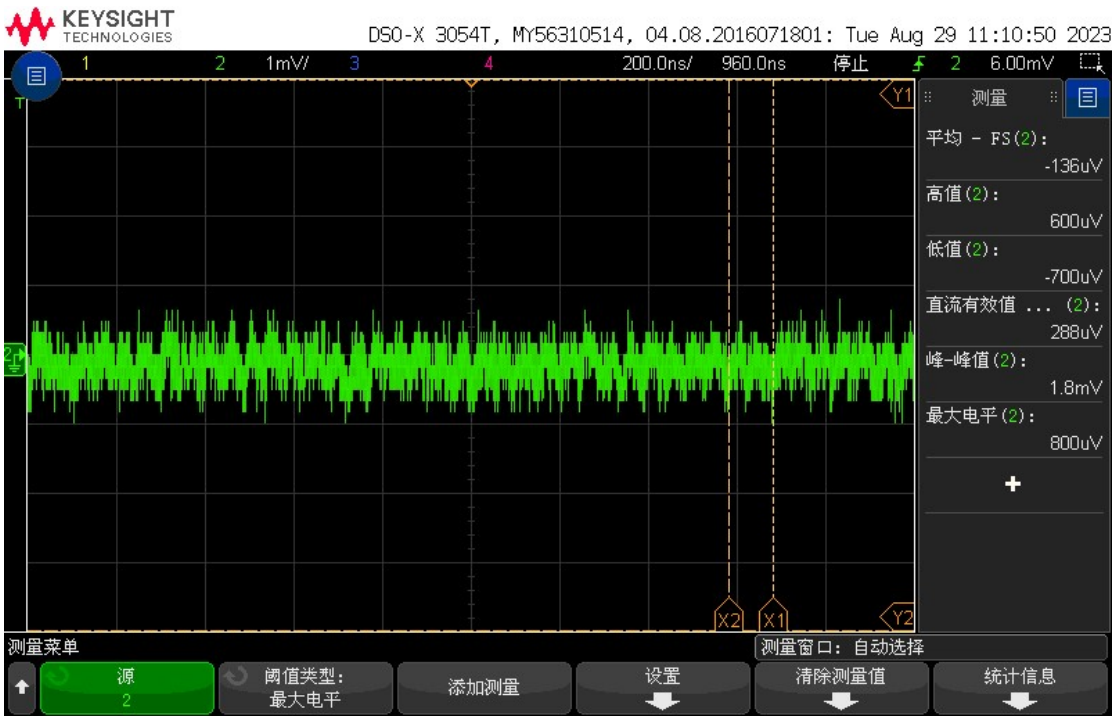
Note: The output waveforms are with no signal and no common mode voltage.

- Output waveform referenced to GND at output GND pad

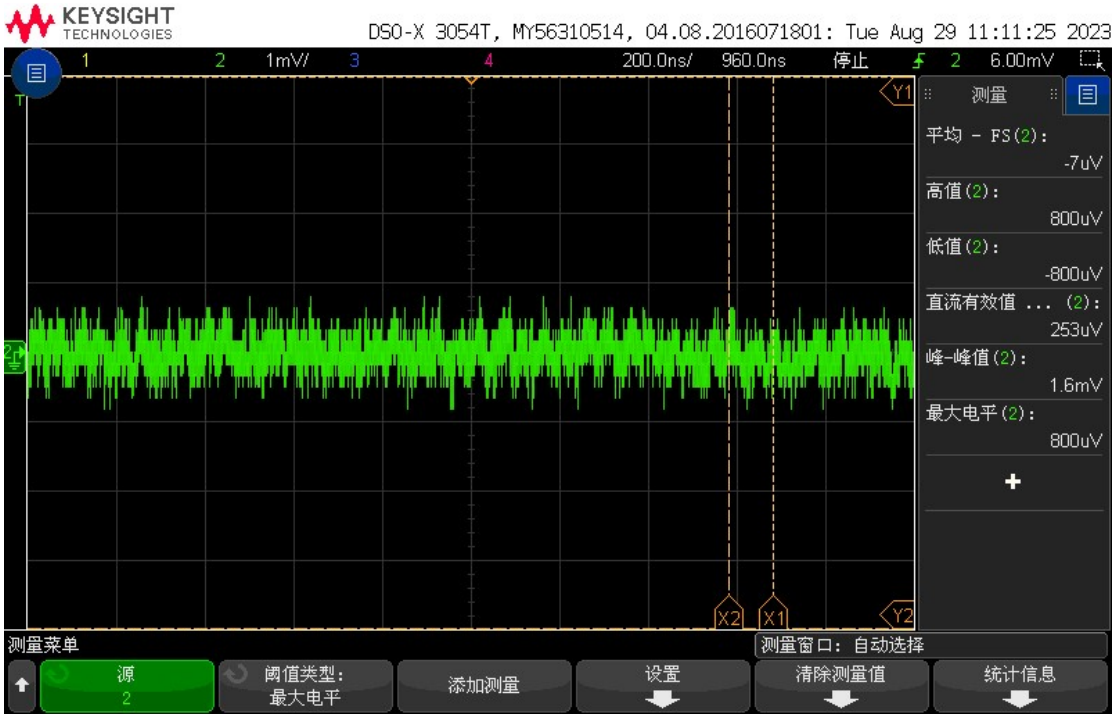




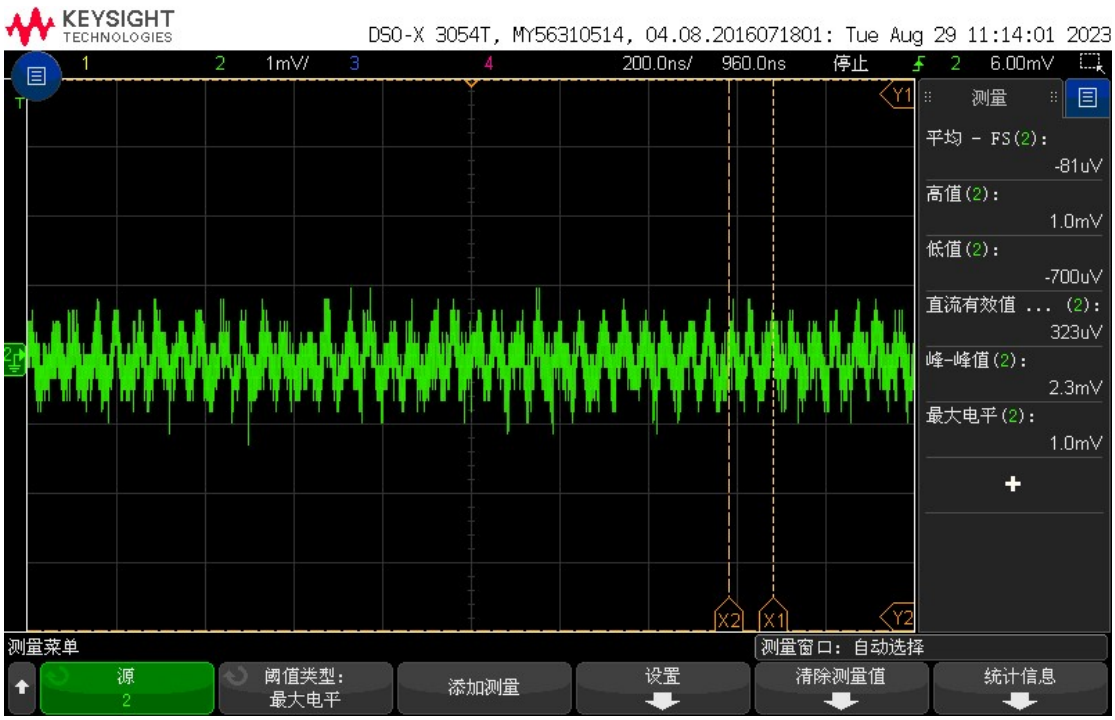
- C12 GND terminal waveform (reference to the same GND pad as output waveform)



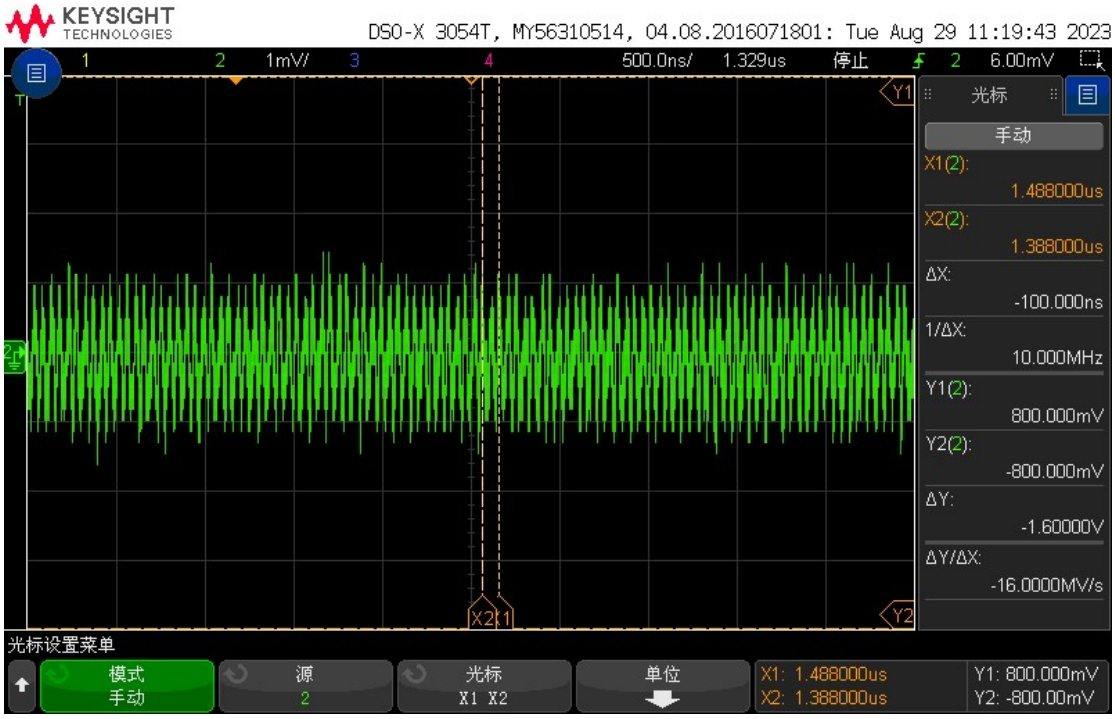
- C12 3V terminal waveform (reference to the same GND pad as output waveform)

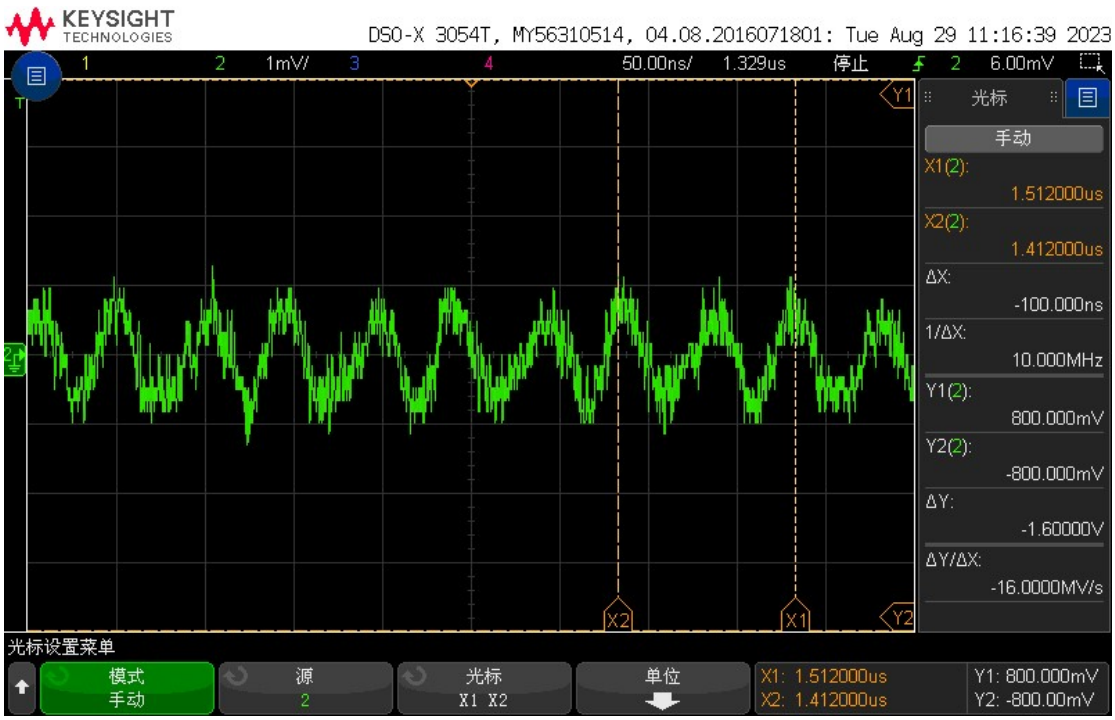


- Opamp VCC terminal waveform (reference to the same GND pad as output waveform)



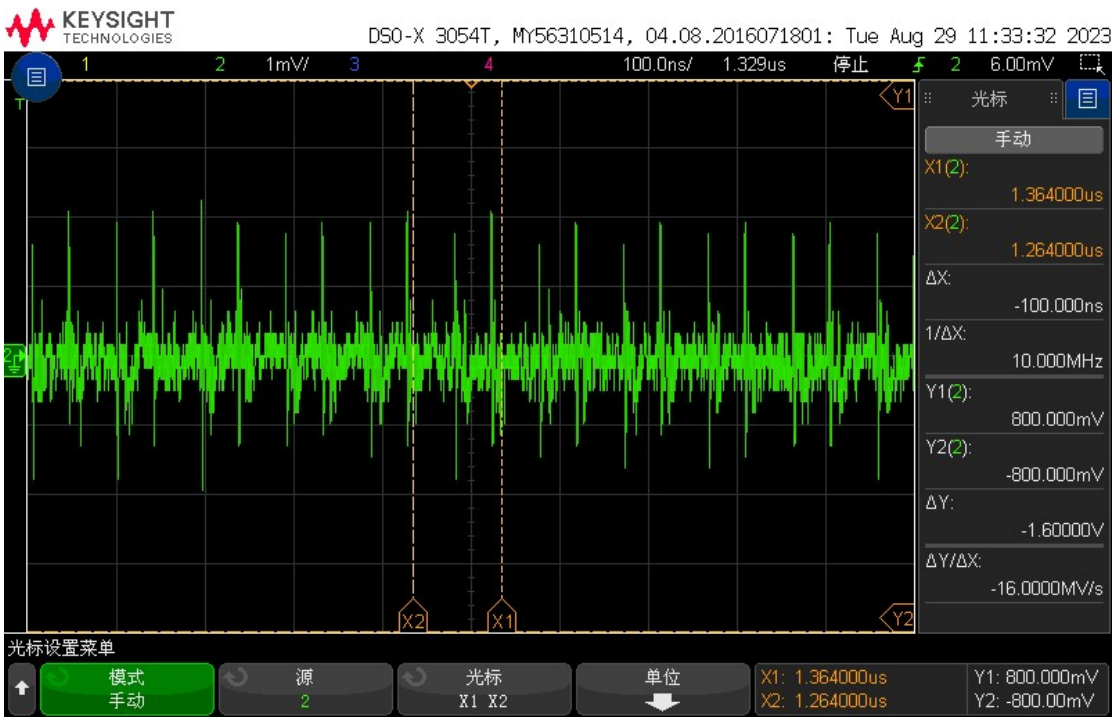
- Voltage across 1nF chip MLCC on top of Opamp



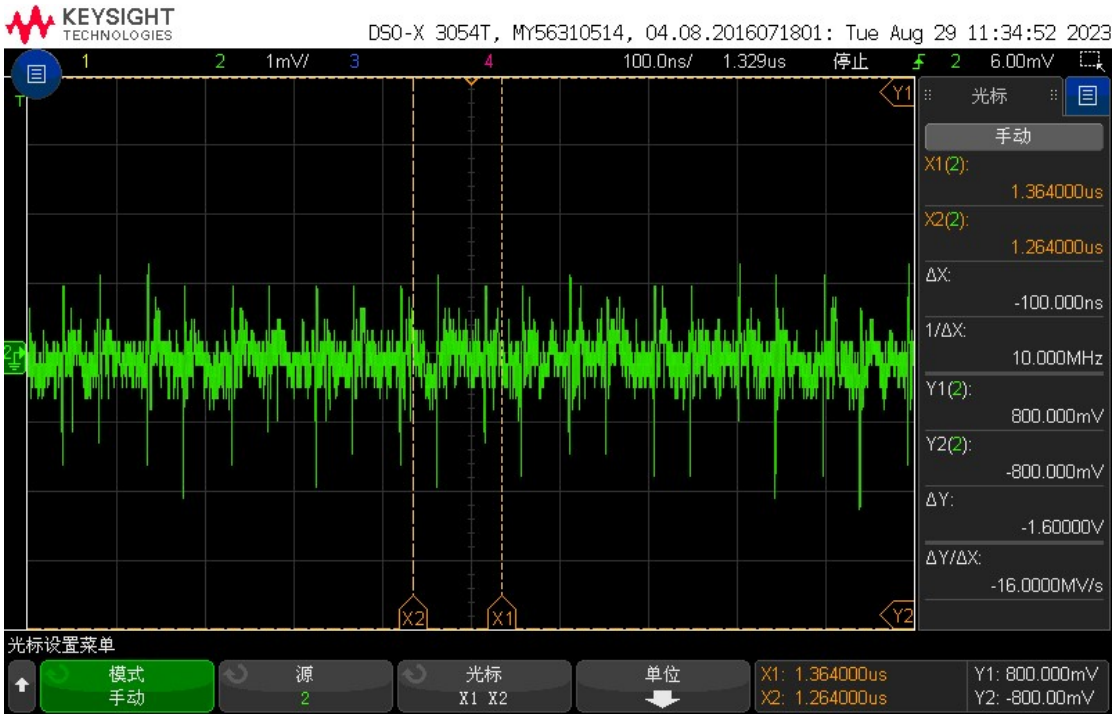


After removing this 1nF chip MLCC on top of Opamp.

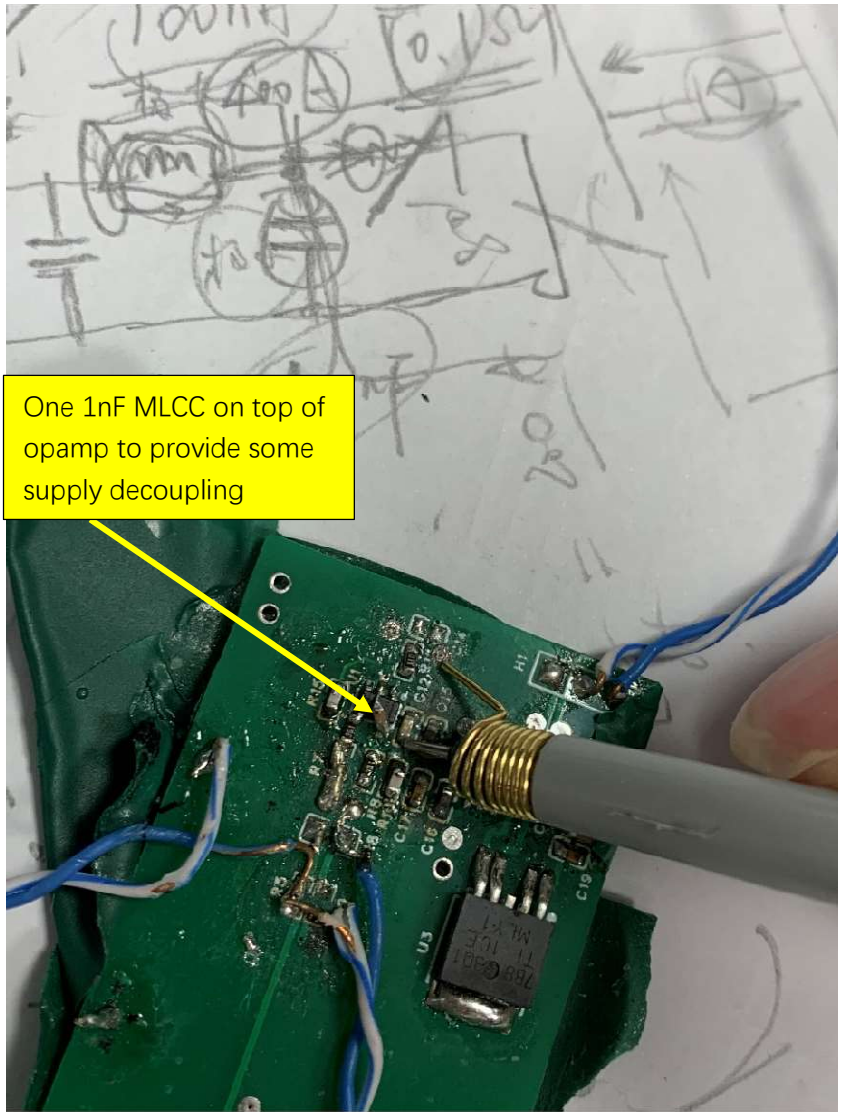
- Opamp VCC terminal waveform (reference to the same GND pad as output waveform)



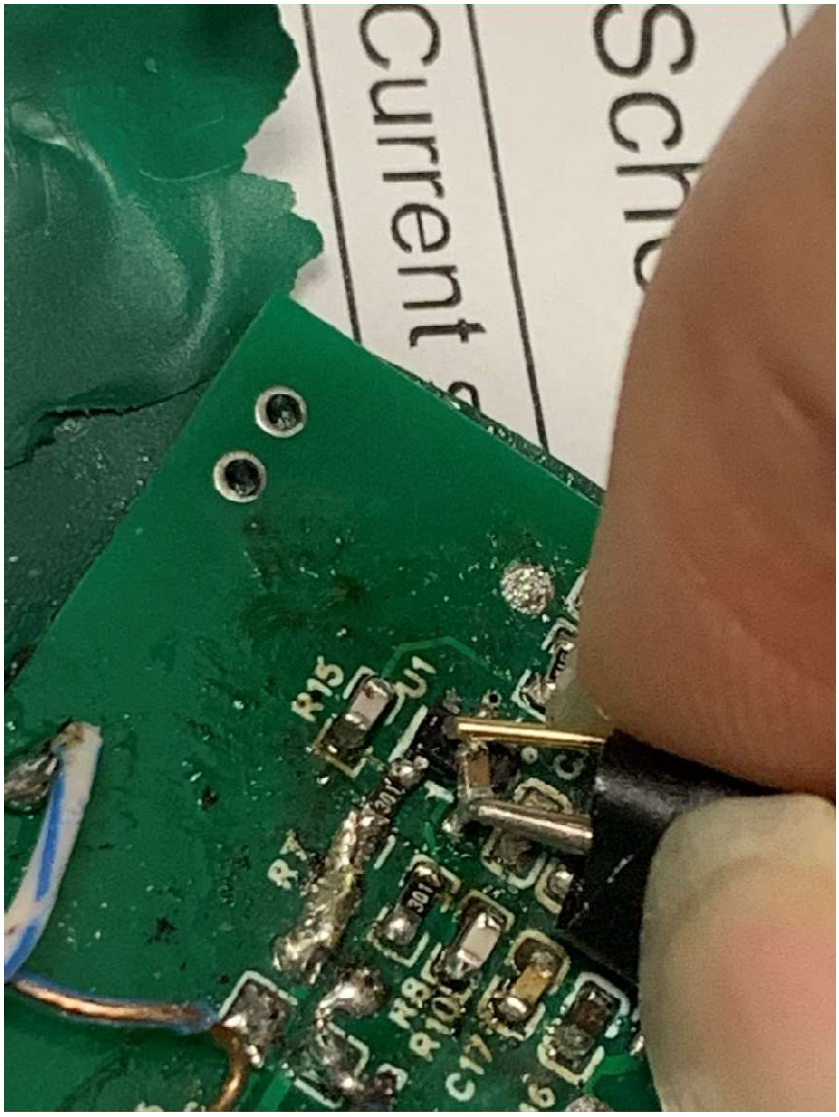
- Opamp VEE terminal waveform (reference to the same GND pas as output waveform)



Note: The 1nF chip MLCC on top of Opamp was added when I first saw the spike like noise on the supply pin. I knew the power decoupling is not well laid out. After the 1nF capacitor is added, the spike like noise is gone from the voltage at VCC pin. But I had not measured the voltage across the 1nF capacitor. I just noticed this time that the voltage across 1nF capacitor is still not good enough. See below figure for information of this extra decoupling capacitor.



Below picture shows how I measured the voltage across this extra decoupling capacitor.


Current
R15
U1