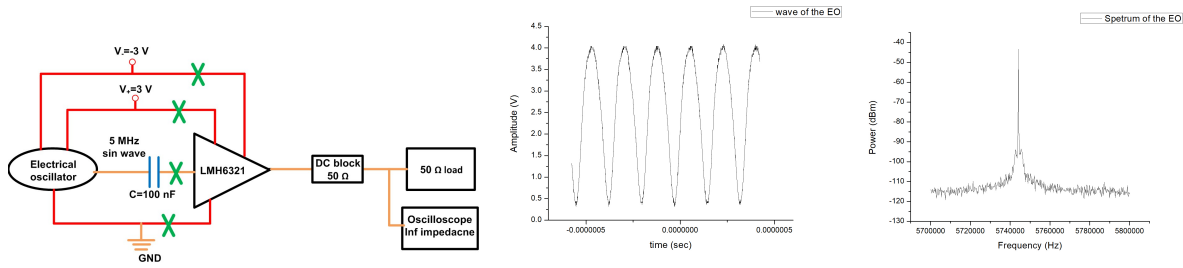


Hi Robert,

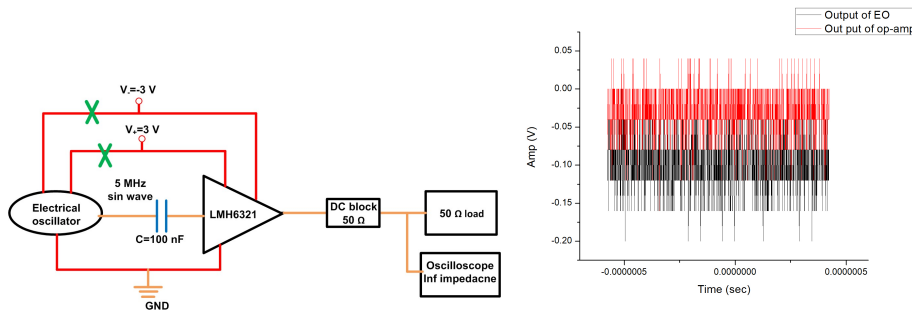
Firstly thanks a lot for your quick reply. Follow your ideal, the Electrical oscillator (EO) and the op-amplifier are now sharing the same bias, and a DC block capacitor is added between the EO and the op-amp, see the figures below. I have made some test based on the schematic that you suggested.

Firstly, i run the EO separately, I record the wave and the spectrum of the EO, you can see the setup and the recorded signal below:

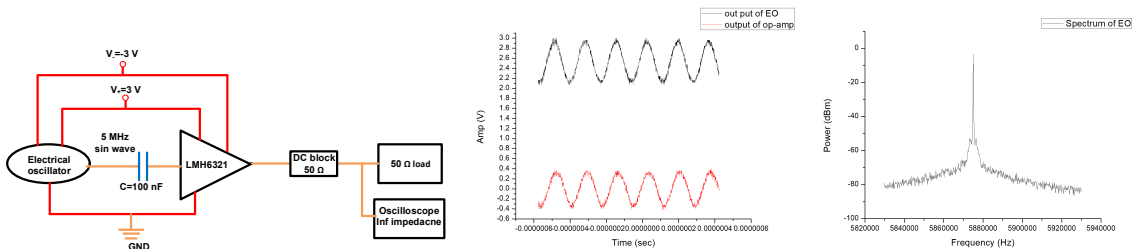


We can see that the EO output an almost sin wave with frequency of 5.74 MHz.

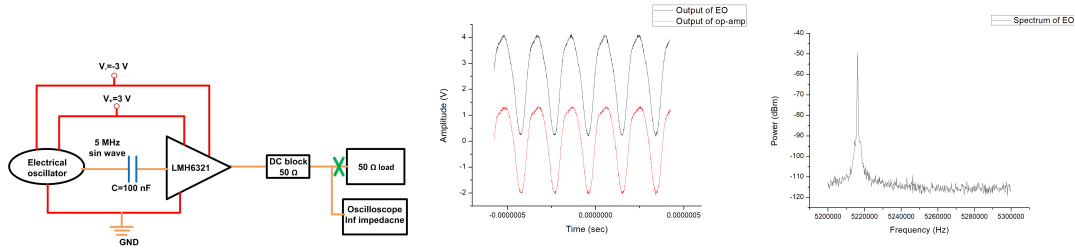
Then I cut off the power supply of the EO, this time I did not see the parasitic oscillation for both the EO itself and the op-amp. See below figures



Now I running the setup (I think same as you suggested?) see below. I can see the output of the EO and the op-amp are the same but different than the output of the separated EO, you can see the frequency is now 5.875 MHz which is different than the 5.74 MHz of the separated EO. beside the output amplitude of EO is different than the seperated EO.



Now I disconnected the 50 ohm load, the output wave of the EO and the op-amp are still almost the same, besides the amplitude of the EO now becomes same as the amplitude of the separated EO (peak-peak almost 3.5 V), but the frequency of the EO now is 5.215 MHz, still different from the 5.74 MHz of the separated EO.



Do you have any suggestions for the schematic.

My purpose is simple, just using op-amp (LMH6321) to extract the voltage of the EO (output impedance has to be changed during the using), filter the DC component and then drive another 50 ohm load, but the EO itself should not be affected by the load.

Thanks you very much

Best

Ke