1，Overview

LCTECH voltage transformer with OP module is equipped with ZMPT101B series high-precision voltage transformer and high-precision operational amplifier circuit, which is convenient for signal acquisition of AC voltage within 250V.

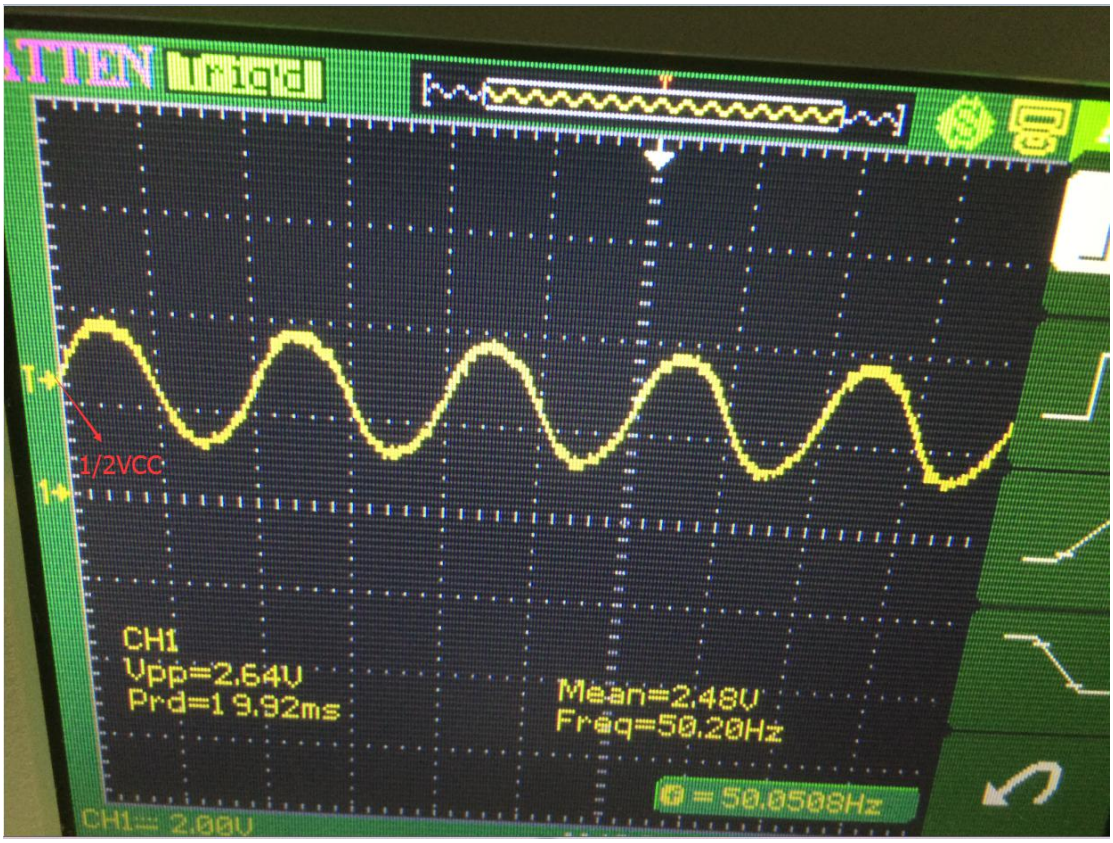
2，Features

1. On-board precision miniature voltage transformer
2. The on-board high-precision operational amplifier circuit can accurately sample the signal and properly compensate the signal.
3. The module can measure AC voltage within 250V, and the corresponding output analog quantity can be adjusted
4. Power supply voltage (VCC) 5-30V
5. The output signal is a sine wave, and the middle value (DC component) of the waveform is 1/2VCC

3, Hardware description

Board size: 49.5(mm)x19.4(mm)
Board function description:
L, N: Connect to alternating current within 250V
VCC, GND: working voltage (DC 5-30V);
OUT, GND: output signal.

When L and N are connected to AC220V, VCC and GND are connected to DC5V, and OUT and GND are connected to an oscilloscope, the following waveforms can be seen:



Adjusting the potentiometer can change the amplitude of the output waveform (the intermediate value will not change during the adjustment process), and the range of the waveform is between 0-VCC; if the waveform is distorted during the process of increasing the amplitude, it can be increased appropriately Working voltage VCC to solve; if you want the middle value of the waveform to shift to 0 point, you can connect a capacitor of about 105pF in series with the OUT terminal to filter out the DC component in the waveform.