LM2676 debugging instructions

The test circuit of LM2676 is built according to figure 1, and the test point is shown in the figure.

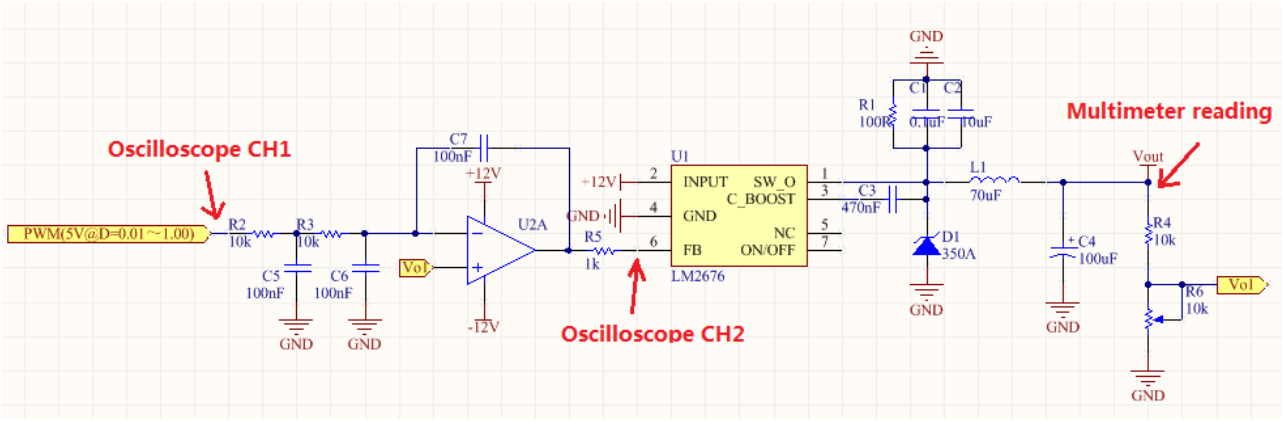

Fig 1 LM2676 Test Circuit

1 The relative parameters of the initial state.

1.1 The initial output voltage is set to 0V., and the output voltage is 0.0642V with multimeter. See Fig2

Fig2 initial state parameters

1.2 CH1 is PWM setting voltage (0V), and CH2 is FB voltage (0.0343V). See Fig3.

Fig3 The oscilloscope display of initial state

2 Adjust the output voltage 1 (for example, 3.7V) with relevant parameters.

2.1 The output voltage is set to 3.7V, and the measured output voltage of multimeter is 3.7168V. See Fig4.

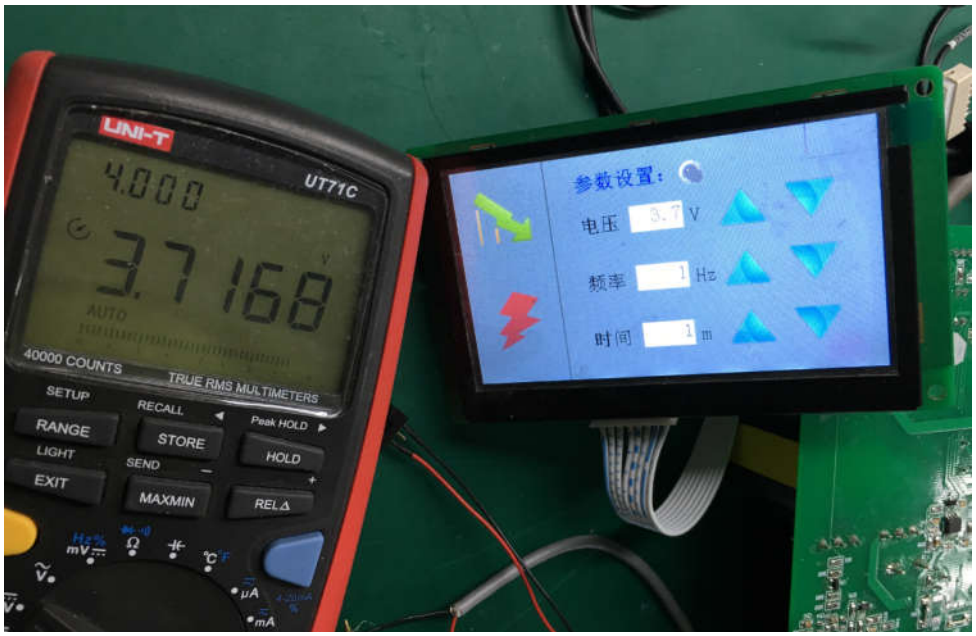

Fig4 Output voltage1 parameters

2.2 The oscilloscope display. CH1 is PWM setting voltage (3.7V), and CH2 is FB voltage (1.46V). see Fig5.

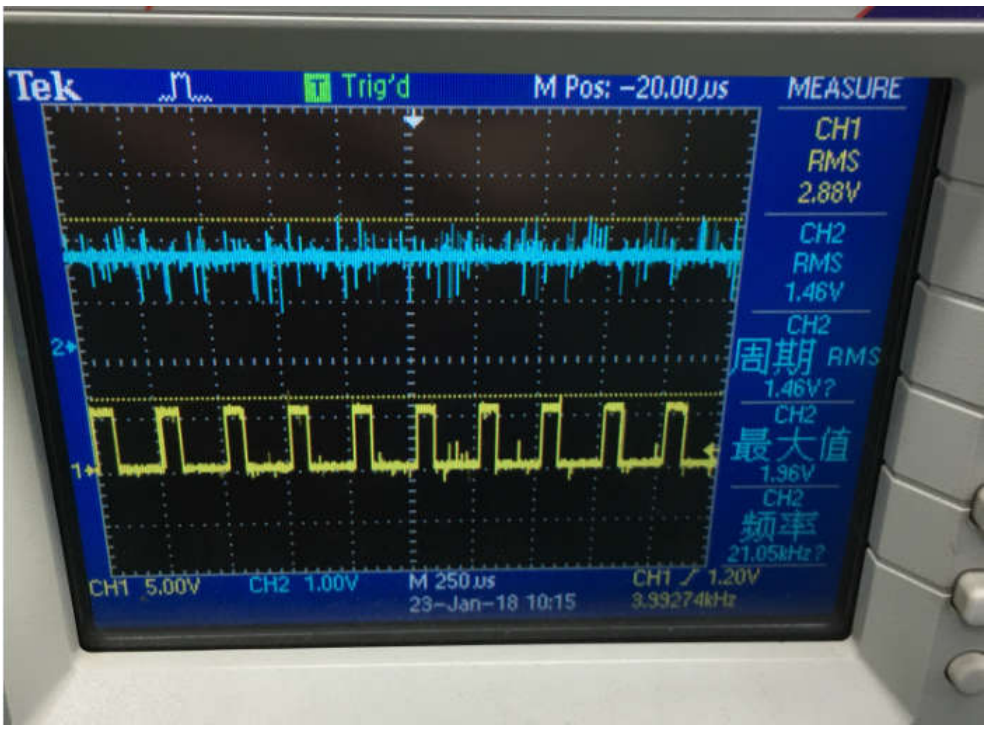

Fig5 The oscilloscope display of output voltage1

After 30 to 50 seconds, the relevant parameters are as follows.

2.3 The output voltage is still set to 3.7V, but the measured output voltage of multimeter is 0.0009V. See Fig6.

Fig6 **Output voltage1+** parameters

2.4 The oscilloscope display. CH1 is PWM setting voltage (3.7V), and CH2 is FB voltage (0.676V). See Fig7.

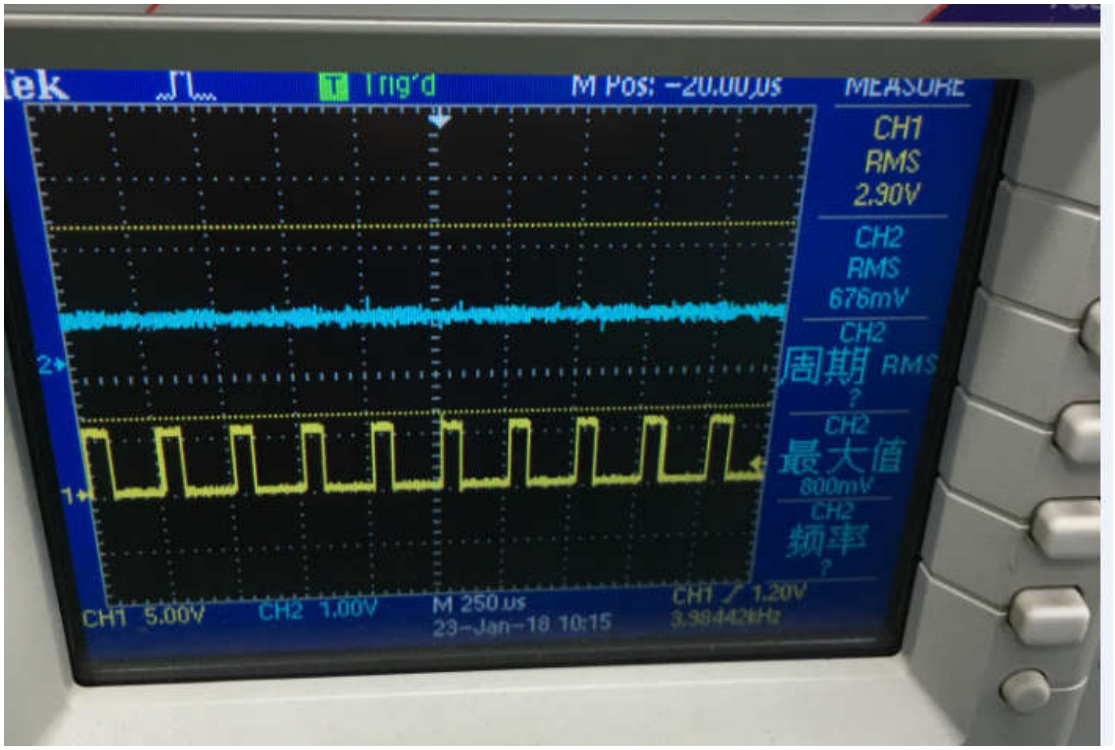

Fig7 The oscilloscope display of output voltage1+

3 Adjust the output voltage 2 (e.g 0.3V) with relevant parameters.

3.1 The output voltage is set to0.3V, and the measured output voltage of multimeter is 0.3594V. See Fig8.

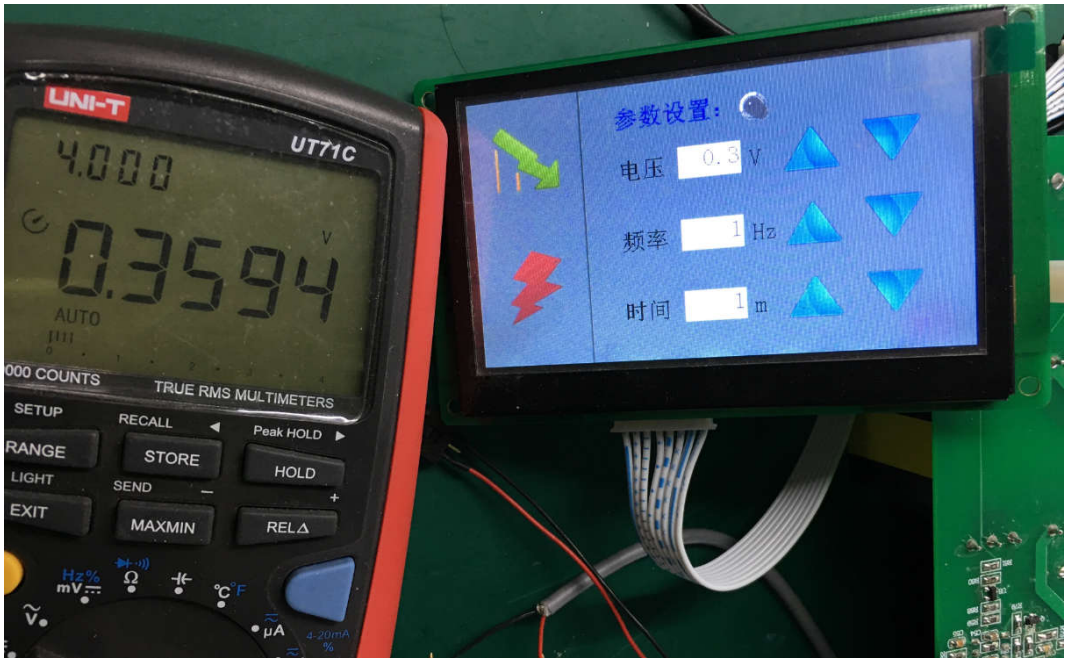

Fig8 Output voltage2 parameters

3.2The oscilloscope display. CH1 is PWM setting voltage (0.3V), and CH2 is FB voltage (0.138V). See Fig9.

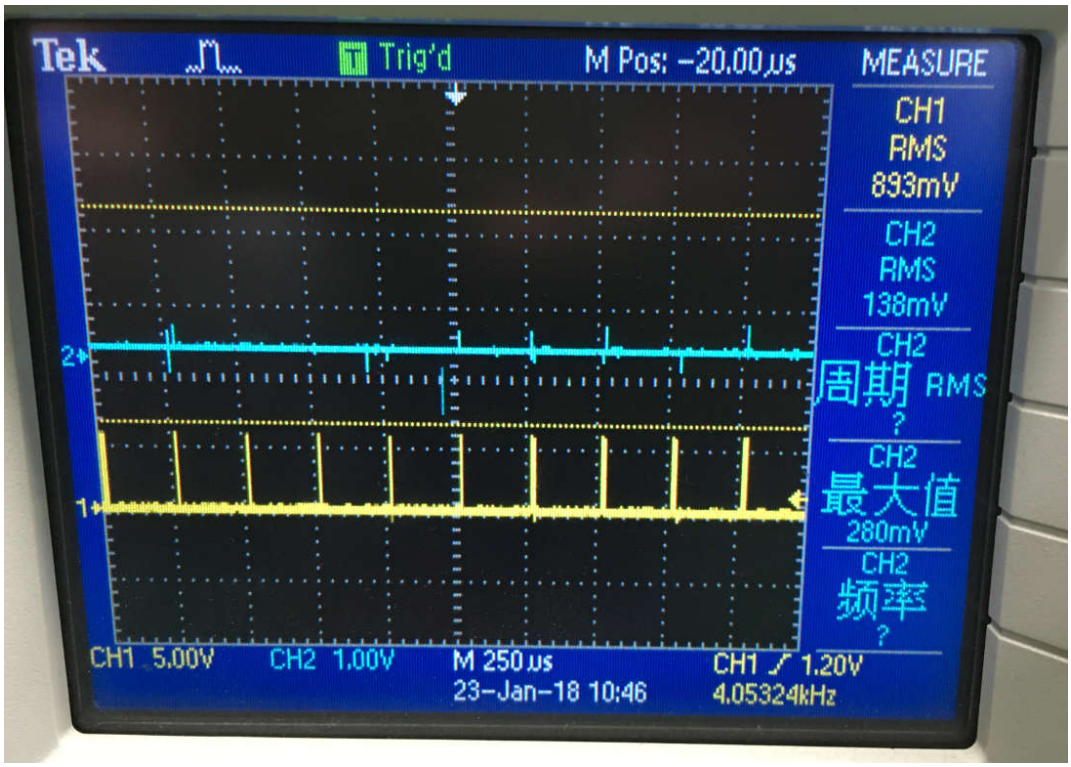

Fig9 The oscilloscope display of output voltage2

After 30 to 50 seconds, the relevant parameters are as follows.

3.3The output voltage is still set to 0.3V, but the measured output voltage of multimeter is 0.0009V. See Fig10

Fig10 Output voltage2+ parameters

3.4The oscilloscope display. CH1 is PWM setting voltage (0.3V), and CH2 is FB voltage (0.136V).See Fig11.

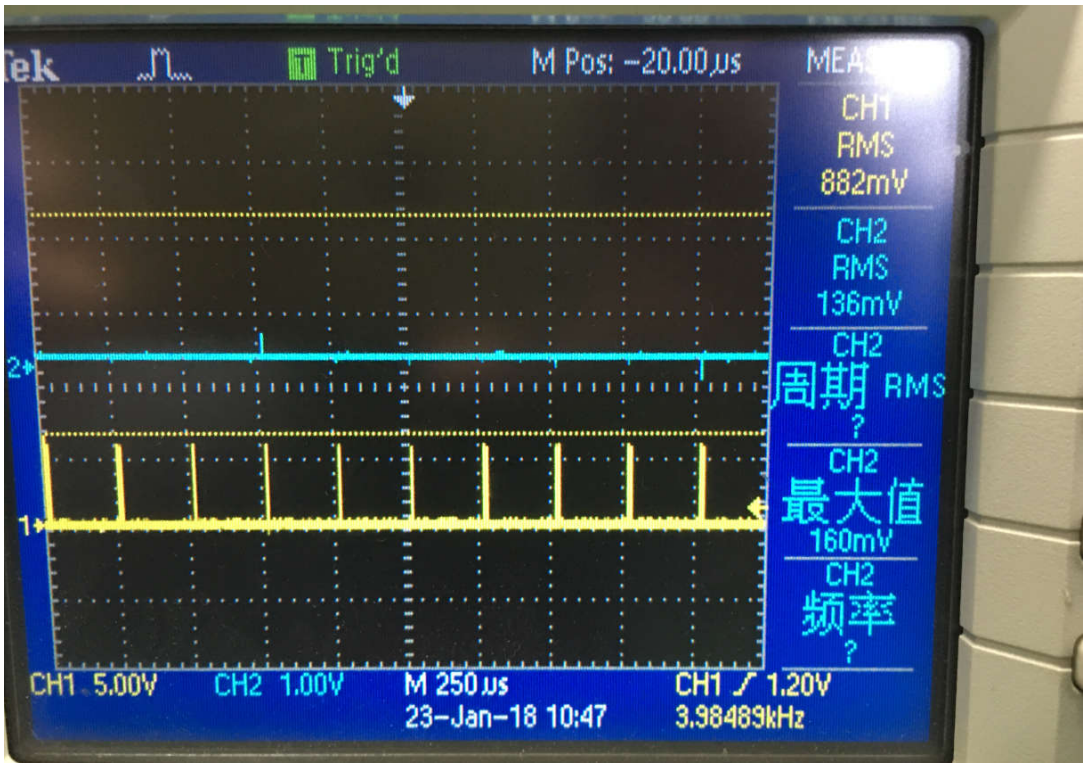

Fig11 The oscilloscope display of output voltage2+