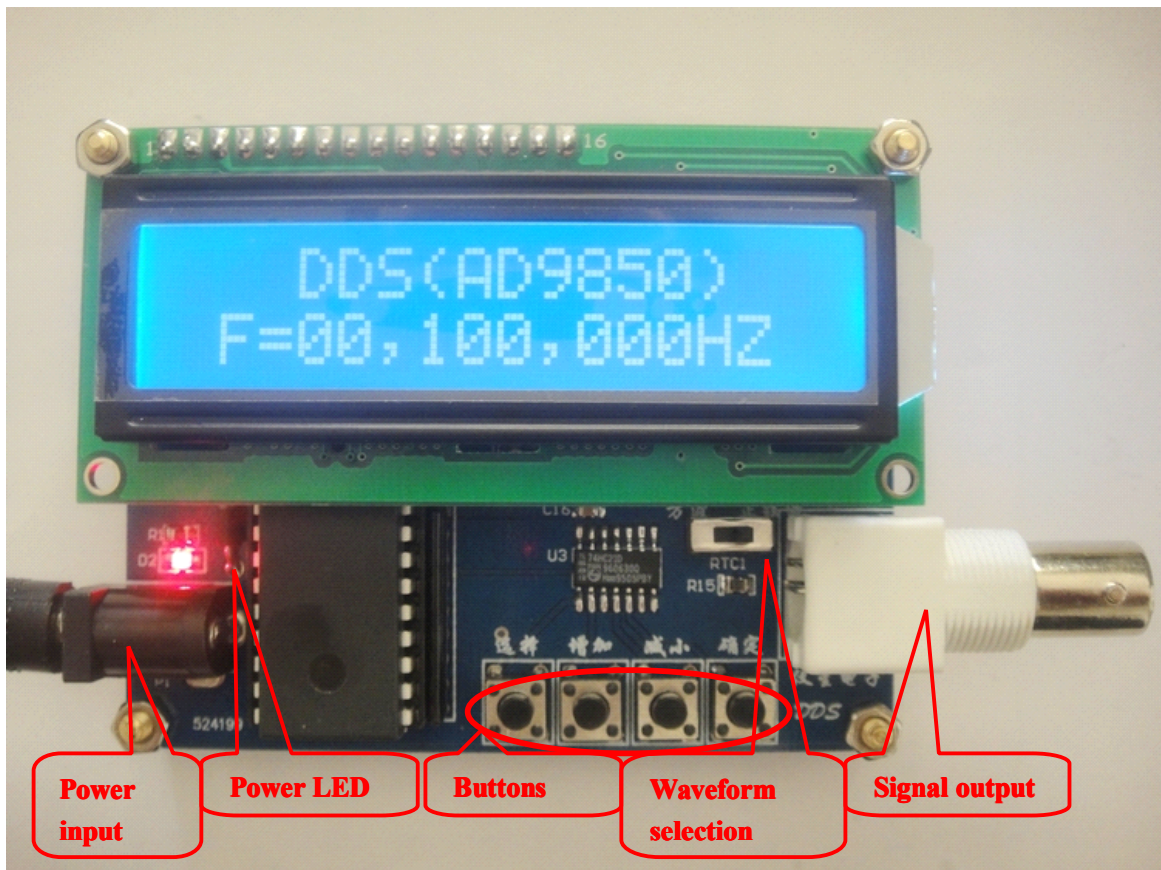
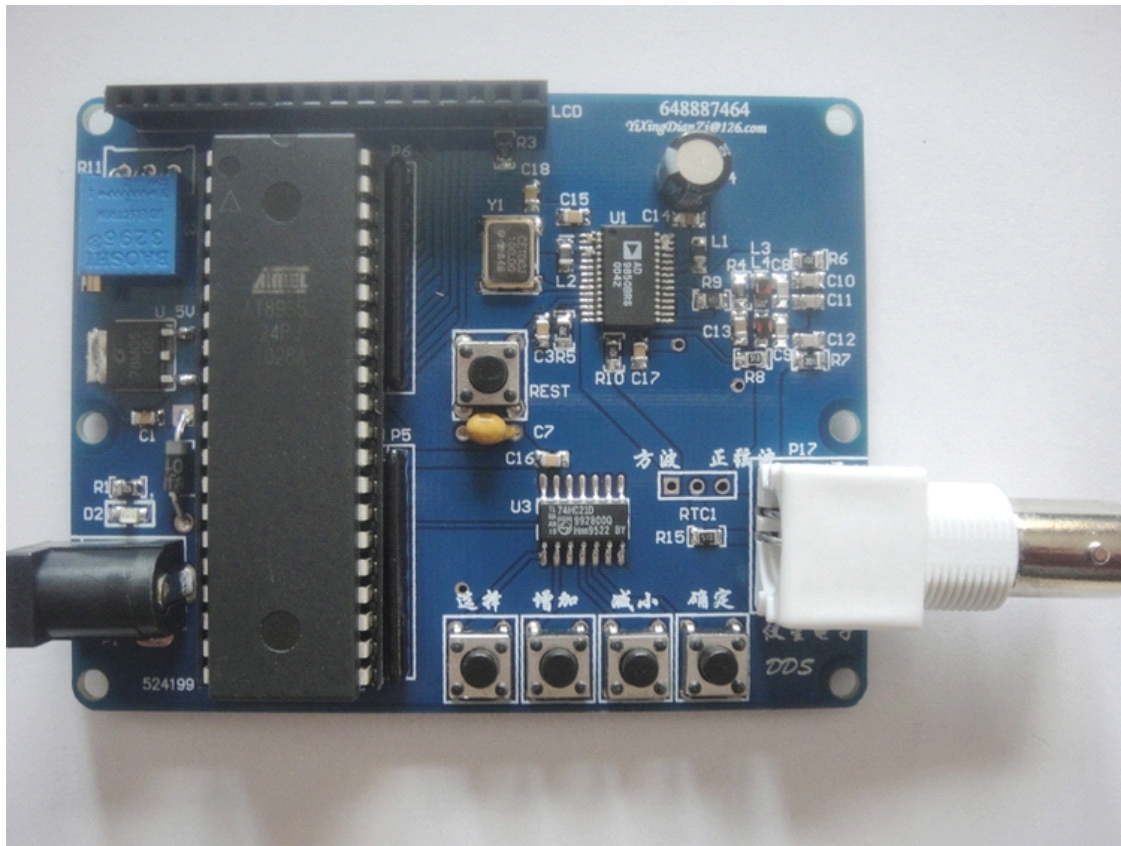


## **Low Cost 50MHz DDS Function Generator Based on AD9851**

An extremely simple and low cost Sine/Square wave generator based on the Analog Devices AD9851 Direct Digital Synthesis (DDS) Generator chip. The frequency can be set for any frequency from 1Hz to 50MHz in 1Hz resolution steps! All this with four push buttons and a 1602 LCD display. The controller chip is a 8051-core STC89C52RC.

For more information of AD9851, please visit [www.analog.com](http://www.analog.com)

**Board:**



BNC cable:



### **Descripton:**

Waveform selection: Left for Square wave, right for Sine wave.

Buttons: from left to right,

- ◆ Selection button: Press to enable and move the cursor on the LCD display, while the LCD indicates which digit of the output frequency is being displayed and set.
- ◆ Increase button: Press to add 1 to the current digit value.
- ◆ Reduction button: Press to deduct 1 to the current digit value.
- ◆ Set button: Disable the cursor and end modification.

**Warning :** The power source SHOULD be 7 – 12VDC, barrel inner-positive! More than 12VDC will cause over-voltage damage to this board !