

Circuit Description

The internal circuit of the fan includes power supply voltage reduction circuit, load control circuit, power voltage regulator, main program chip, load driver chip, wifi chip, led display, 26M resonant circuit, touch key circuit, remote control receiving circuit, etc.

First, we give the power PCB a 120VAC 60Hz voltage, then the control PCB is in standby mode for getting the power, we can control the fan by three ways.

1. Touch the key on the control panel.

When we touch the keys on the control panel, the main program chip (MCU1) will receive the signal through the touch key circuit and send the corresponding instructions to the load driver chip (MCU2). Then the load driver chip (MCU2) change the display of led and send the signal to the load control circuit to change the output.

2. Control by remote control

When we use the remote controller to control the fan, the main program chip (MCU1) will receive the signal through the remote control receiving circuit and send the corresponding instructions to the load driver chip (MCU2). Then the load driver chip (MCU2) change the display of led and send the signal to the load control circuit to change the output.

3. Controlled by Mobile App

First we have to connect the fan WiFi to the router according to the instructions in user manual, then we can operate the phone APP to send the signal to the WIFI chip through the router. And then, WIFI chip will send the signal to the main program chip (MCU1). The main program chip (MCU1) will send the corresponding instructions to the load driver chip (MCU2). Then the load driver chip (MCU2) change the display of led and send the signal to the load control circuit to change the output.

The main program chip (MCU1) also can feedback the fan current status to phone APP through the WIFI chip and the router.