ATX POWER SUPPLY TESTER

Prepared by: Chan Yi Hao

ABSTRACT

This report is going to introduce about the project I did which is the ATX Power Supply Tester. The ATX power supply is build and installed in a CPU. A tester is built specially to test the voltage level and the percentage deviation at the output of the ATX power supply.

A rotary switch is used to quickly check all the output voltages. The percentage deviation of a selected output is shown on 6 LEDs. Two of these LEDs show whether the deviation is positive or negative and the other four indicate the percentage difference from the required output voltage.

For output voltage that is connected to more than one pin, only the first pin is tested. There is a 26 – pin header on the board that can be used to test each pin individually.

When the elected output is +12V, but the ATX power supply supplies only +11.4V, +11.4V will be attenuated less than the nominal voltage. When it passes through the comparator, the comparator compares it with the reference voltage; it will show 5% deviation. Thus the 5% LED will lit up and the negative deviation LED will also be lit up.