

8051 based Inverter/UPS with inbuilt Charging system

ajay_bhargav, Thu Nov 01 2012, 02:25 pm

[8051 based Inverter/UPS with inbuilt Charging system](#)

Well this is one of the most interesting and long awaited project uploaded on any microcontroller website. Its an Inverter/UPS with inbuilt charging system based on 8051 (AT89C2051) with a rating of 3000VA. As you all know an inverter converts DC voltage to AC, This project uses 24V DC battery and convert it to 220v 50Hz AC. Here are some pictures of constructed hardware.

The inverter system is divided into six sections:

- » Inverter
- » Charger
- » Multivibrator
- » Powerpack
- » Sensors and Indicators
- » Automatic changeover

8051 controller plays its major role in "Sensors and Indicators" section. 8051 is used to monitor the voltages and indicate status through LEDs. You can also find UPS test design for Proteus VSM simulator, to stimulate the design in case of any doubt. It is the same controller circuit as given in pdf. At89c2051 uses an active low to perform its operation from lm393 voltage comparator that's why a push button is connected to ground to test the circuit.

You can find pictures, code and small documenation that explains the working and block diagram of this project. Incase you have any doubts, feel free to post on our forum at www.8051projects.net/forum.html

I would link to thank Victor (ugoo5000) for sharing his great project again with us. Also I want to apologize for delay in uploading this project I should have done it earlier. Thanks Victor for great contribution to this webiste.

Visit following link to download this project:

8051 based Inverter/UPS with inbuilt Charging system