First Look

Thanks for purchasing xBoard MINI ™, the state of the art AVR microcontroller learning and development kit from eXtreme Electronics. This help file will give you the general introduction of the system so you can be comfortable with it.

Why xBoard™ MINI

For any microcontroller based development you first need so have certain setup around a microcontroller like regulated power supply, crystal oscillator etc. This is the basic setup of microcontroller you will need before you can experiment with any project. You can make this "basic setup" yourself in a bread board, veroboard(general purpose pcb) or a home made custom PCB(check out the net there are tons of tutorials teaching making PCBs at home). The best solution is a custom-made PCB. Beacause as this basic setup will be required in any project if you use breadboard will will want to leave the connection as it for reuse. However, this will engage one breadboard and the design on breadboard are not durable. After some time some connection will become loose or may come out at all and you will wonder where this wire was connected. This will made debugging much more harder.

To save you from all this we have created the xBoard Series of single board computers. The xBoard™ MINIis based on the ATmega8 microcontroller from Atmel which is most powerful and popular 28PIN MCU. The board is made with high quality PCB and can handle rough use. The board is fully tested so you can be sure there is no error is "basic" setup this will give you time to concentrate on your design. The board is very carefully designed to give a very smooth experience of playing with MCUs.

Quality Support Us

xBoard™ MINI comes with extensive tutorials to get you started with microcontroller. The tutorials are strategically designed to give step by step guide to user. So they are very useful for beginners.
Advance user will find the advance chapters of the tutorials very useful. New tutorials, projects etc are regularly posted on our site http://www.extremeelectronics.co.in
The product CD-ROM has every tools you need to make microcontroller projects
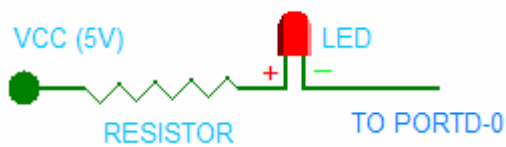
Board Overview
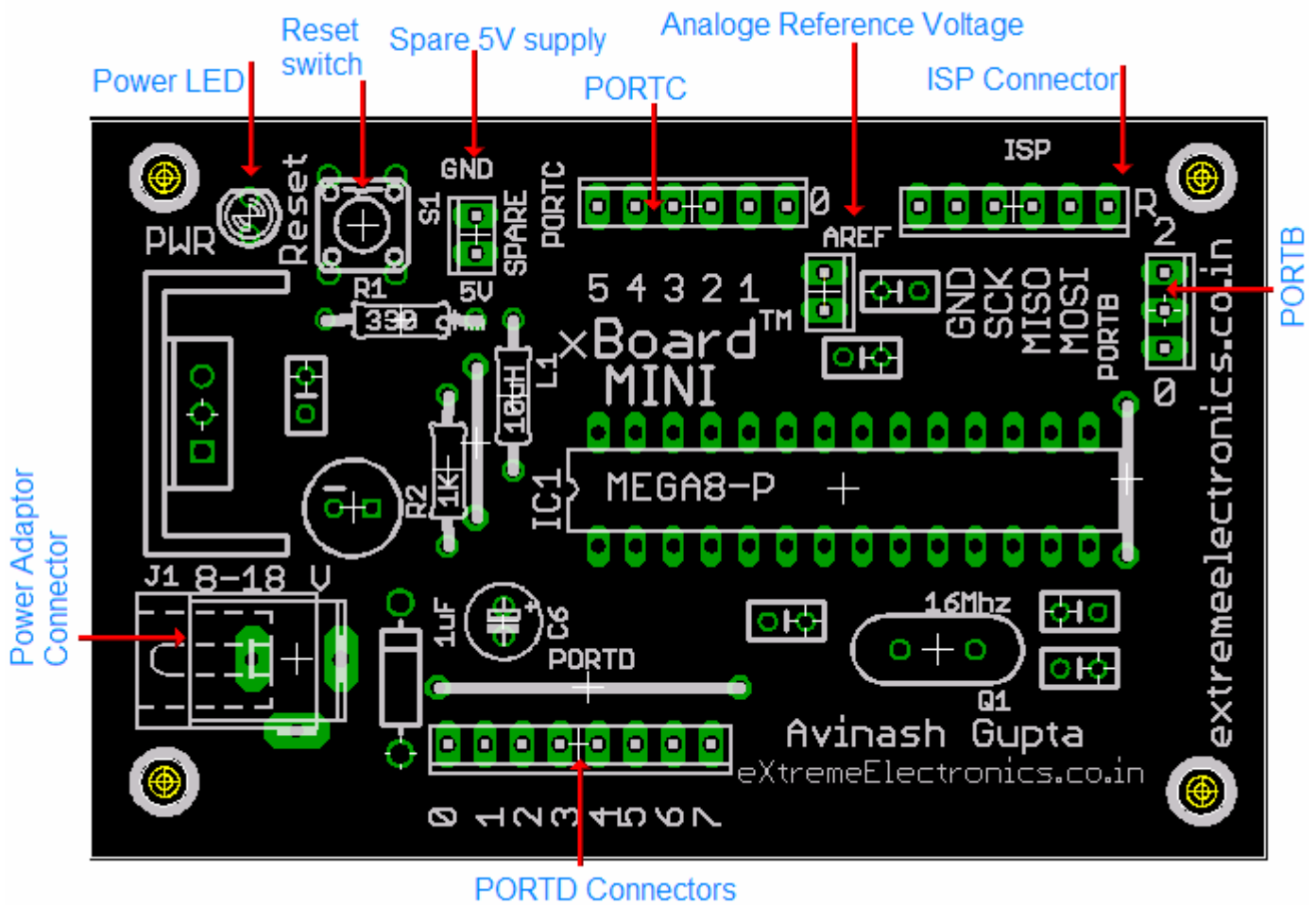
Board Overview

A Test Run

The board comes preloaded with a simple program for blinking led connected in PORTD0 connect a 8PIN connector(provided with kit) to PORTD connector and connect the wire from PORTD-0 i.e. the leftmost wire to a LED as shown below. The resistor value is 330ohm.

Connecting A LED

Connect the power adaptor (provided with kit) to power adaptor jack present in the bottom left of the board. Connect the adaptor to the mains power supply. Switch on the supply. The power led should glow indicating board is powered. The LED connected to PORTD should also start blinking now. This indicate the board is ok and the CPU is running.

Features

- Small Size and reasonably priced.
- Not just a board but a complete learning kit with high quality tutorials packed in CD-ROM
- High quality PCB and robust design provides strong foundations to your projects
- Reverse voltage protection.