DIFFERENT PATTERNS OF MESSAGES DISPLAYING ON 16*2 LCD DISPLAY USING 8051 MICROCONTROLLER

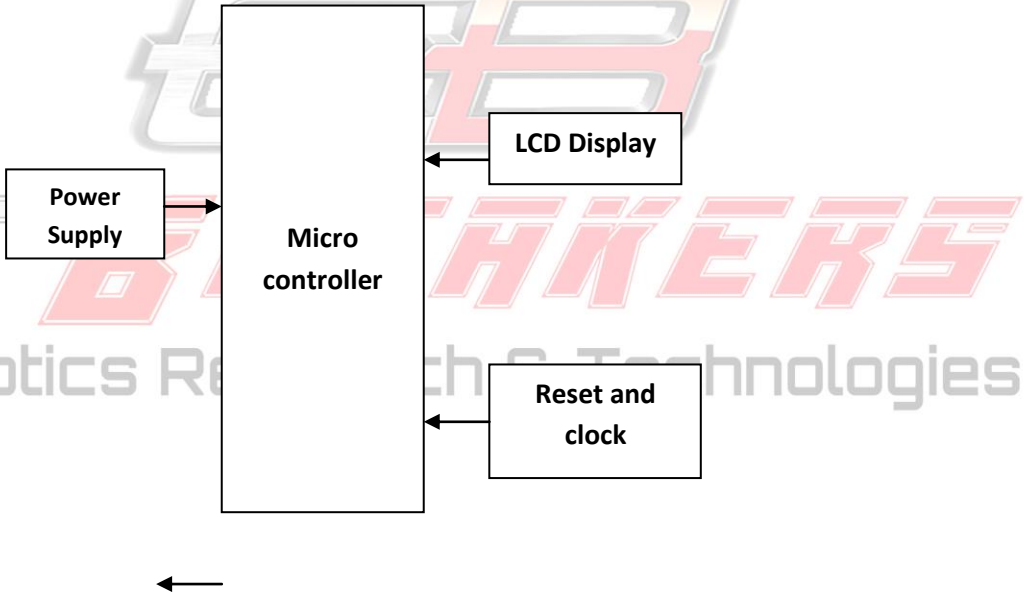
Description:

Liquid Crystal Display (LCD) is very commonly used electronic display module and having a wide range of applications such as calculators, laptops, mobile phones etc. 16×2 character lcd display is very basic module which is commonly used in electronics devices and projects. It can display 2 lines of 16 characters. Each character is displayed using 5×7 or 5×10 pixel matrix.

Interfacing 16×2 LCD with 8051 using Keil C is bit complex because there is no powerful libraries in Keil C. To solve this problem we have developed a LCD library which includes commonly used features, you just need to include our header file and use it. You can download the header file at the bottom of this article.

LCD can be interfaced with microcontroller in 4 Bit or 8 Bit mode. These differs in how data is send to LCD. In 8 bit mode to write a character, 8 bit ASCII data is send through the data lines D0 – D7 and data strobe is given through E of the LCD. LCD commands which are also 8 bit are written to LCD in similar way.

Block diagram:



Hardware requirements:

1. Micro controller
2. LCD

Software requirements:

1. Keil software
2. Embedded c

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