Scrolling Dot Matrix LED Display using 8051 (updated)

ajay_bhargav, Sat Jun 30 2012, 03:38 am

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Here is another feature packed and knowledge rich project update from our dear friend **Majoka**. He is savior for many students. We already have his previous Dot Matrix display using 8051. This project is an update to the same project with some additional features and lot of study material.

Here is what you will find in the download package:

1. Dot Matix Display code in C

2. Dot Matrix Display code in Assembly

3. VB6.0 based GUI software with code

4. Schematics (both old and new design)

Here is a big list of change from the previous version:

On Hardware side:

» ULN2803 array is used to sink the current of Leds in last version decoder was used to sink the current so the display was not so bright this time it is comparatively more bright at 5 volt.

» 74HCT4514 decoder is used instead of 74ls154 both has inverted output to each other.

On Firmware (controller coding) side:

» Keil4 is used for c coding

» The firmware was in asm language in last project. In this updated version that is converted into c language as c is more professional and easy Language.

» Scrolling speed can be changed and after changing it is saved in the EEPROM.

» Full Duplex Serial Communication at 9600 baud rate.

» Maximum 200 Character can be sent to Display.

On Software (GUI) side:

» Visual Basic 6 is used to make this GUI.

» Serial Port API is used that make it compatible to work on window xp, vista and window 7.

» Auto Detect number of Serial Ports in PC.

» Scrolling speed Slider bar is added to change the speed of scrolling message.

» Software can be Hide in system tray

and many more.....   Complete list with discription can be found in download package.

Here is a working video of this project

Download Project:
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You can ask any queries regarding this project in our **forum**