Portable Notetaker for the Blind - PIC32 Project

ajay_bhargav, Fri Oct 30 2009, 11:00 am

It's very easy for us to write, as we only need some paper and pencil/pen. However, did you know that writing is a hard task, especially for the blinds?

Thanks to Louis Braille, the father of Braille system, which is a worldwide system that being used by blind or visually impaired people for reading and writing.

Technically, there is a step for reading the Braille, as the readers need to pass their fingers over characters, which are made up of an arrangement of one to six embossed points.

Honestly, it's the most effective method for the blinds to read and write, even in this 21st century. Hence, many factories have trying to develop the Braille embosser with low-cost and low-tech, making it as simple as possible for the blinds to use!

However, even the traditional Braille embosser has it disadvantages, such as:

» It consumes longer time and larger space to write,

» The user's hand is easily get tired, due to the using of force pressing stylus.

Portable Notetaker - Block Diagram

The main objective of this Portable Notetaker is to develop a cheap, pocket size device, which is allowing the blinds to enter notes via Braille m-touch keypad to access and store words or to output result in audio format via speech synthesizer faster!

By the way, the Portable Notetaker is a USB Human Interface Device. So, it's possible for the user to connect it to a PC and operates like a regular keyboard.

More information of description, circuit diagram and prototype board can be obtained from here

[Source **myPIC32**]