

SUPER PROBE

Prepared by: Chin Shin Hau

ABSTRACT

Peripheral Interface Controller (PIC) is one of the most commonly used controllers and its popular with developers and hobbyists alike due to their low cost, wide availability, large use base, extensive collection of application notes, availability of low cost or free development tools, and serial programming (and re-programming with flash memory) capability.

The Super Probe is designed around a PIC16F870, four single digit 7 segment display, a probe tip and very little else. The PIC itself has the ability to carry out several functions such as voltage measurement, capacitance measurement and frequency counter by using its built-in module like Analog to Digital Converter module (ADC), Timer0 module, etc. I'm confident that you'll be amazed by simply how much can be done by just a single PIC chip in my Super Probe project.

Basically this project report consists of a few portions. Title page, acknowledgement, declaration and abstract are the initial part of this report. Next, I'll go in details about the construction, circuit analysis, program analysis and the outcome of my project in the following pages. Finally, list of references and the appendices are included to provide a better understanding of my project.