

Lab 5

CCP PWM Mode, Program Memory Paging, Sleep Mode

This lab familiarizes the student with the pulse width modulation (PWM) feature of the CCP module, program memory paging, stand-alone microcontroller operation, and sleep mode (power-saving mode).

- [] Create a new project that contains lab05.asm. This program uses the A/D input on AN0 to create a PWM signal on the RC2 output. Connect a pot to AN0 and an LED to RC2. Run the program and turn the pot to make the LED dimmer or brighter.

- [] Program your PIC so that it can run separately from the debugger. Here are some hints. Note that we have been using the PICkit as a debugger by selecting the **Debugger** → **Select Tool** menu item. We can also use the PICkit as a programmer by selecting the **Programmer** → **Select Programmer** menu item. You can use the PICkit as a debugger or as a programmer, but not both at the same time. Also note that you can program the PIC in either debug mode or stand-alone mode by selecting the **Project** → **Build Configuration** menu item.

