Interrupt Demo

# Overview

This demonstration toggles an LED and increments a variable (gIntCount) when switch 3 is pressed, generating an interrupt.

# Comments and Suggestions

* The counter variable gIntCount is defined in r\_main.c as a volatile variable, since the ISR can change it. Since it is accessed in r\_cg\_intc\_user.c, we need to declare it as an externally defined variable so that the compiler can compile the module.
* Set a breakpoint within the ISR (in r\_cg\_intc\_user.c) and run the program to show that the debugger can stop the program at that point when the switch is pressed.
* The value of gIntCount can be examined by stopping the program, right clicking on the variable and selecting Add to Watch. The variable will be visible in the Watch window.
* To see the variable’s value as the program executes, use the Emulator -> Live Memory option and select the address of the variable as shown in the Location column of the Watch window.
* Notice that the switch bounces sometimes, incrementing the variable by more than one.