

APPLICATION NOTE No. 001
TITLE

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SCI-STI-MM

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1.1 Introduction

1.1.1 Purpose

```
1  /*****
2  Interrupt Service Routin for Timer 0.
3  *****/
4  // LED4
5  static action ADLINT_HANDLER(Timer0_ISR) {
6
7      // See if this is a timer 0 event, by calling a function to
8      // read corresponding bit (16) in the the SIC_ISR register
9
10     if (adi_int.SICInterruptAsserted(ADLINT_TIMER0) == ADLINT_RESULT_NOT_ASSERTED)
11
12         // This return value tells the interrupt manager to process the next
13         // ISR in the chain for this IVG, because we haven't yet serviced the
14         // peripheral that interrupted this time
15
16         return (ADLINT_RESULT_NOT_PROCESSED);
17
18     // clear timer 0 interrupt
19     adi_tmr_GPControl(ADLTMR_GP_TIMER_0, ADLTMR_GP_CMD_CLEAR_INTERRUPT, NULL);
20
21     // toggle the specified LED
22     // ON|ON|ON
23     if(button0 && button1 && button2){
24         ezToggleLED(EZ_FIRST_LED);          // LED4,5,6 BLINK
25     }
26
27     //***CODE SNIPPED***//
28
29     return (ADLINT_RESULT_PROCESSED);
30 }
31
32 //***CODE SNIPPED***//
33
34 /*****
35 Function: Init_Timers
36
37 Set up timers for PWM mode and enale them.
38 *****/
39
40 void InitTimers(void)
41 {
42     //Setting up command table for Timer 0
43     ADLTMR_GP_CMD.VALUE_PAIR Timer0ConfigurationTable [] = {
44         { ADLTMR_GP_CMD.SET_TIMER_MODE,          (void *)0x01          },
45         { ADLTMR_GP_CMD.SET_COUNT_METHOD,        (void *)TRUE          },
46         { ADLTMR_GP_CMD.SET_INTERRUPT_ENABLE,    (void *)TRUE          },
47         { ADLTMR_GP_CMD.SET_OUTPUT_PAD_DISABLE,  (void *)TRUE          },
48         //***CODE SNIPPED***//
49         { ADLTMR_GP_CMD.SET_WIDTH,                (void *)0x00400000      },
50         { ADLTMR_GP_CMD.END,                      NULL                    },
51     };
52
53     //***CODE SNIPPED***//
54 }
55
56 /*****
57 * Function: main
58 *****/
```

```

61 void main(void) {
62
63     u32 ResponseCount;
64     void *pExitCriticalArg;
65     u32 i; //loop variable
66
67     // initialize the EZ-Kit
68     ezInit(1);
69
70     // initialize the flag manager because the LEDs and buttons connect via flags
71     // Since callbacks are not being used memory does not to be given to the service
72     ezErrorCheck(adi_flag_Init(NULL, 0, &ResponseCount, NULL));
73
74     //***CODE SNIPPED***//
75
76     InitTimers();
77
78     while (1) {
79         //***CODE SNIPPED***//
80     }
81
82 } // END WHILE
83 } // END MAIN

```