

```

#include "fsl_device_registers.h"
#include "fsl_debug_console.h"
#include "pin_mux.h"
#include "clock_config.h"
#include "board.h"
#include <string.h>
#include <stdio.h>
#include <math.h>
/*****
 * Definitions
 *****/
#define SOURCE_CLOCK CLOCK_GetFreq(kCLOCK_CoreSysClk)
volatile uint32_t g_systickCounter;
/*****
 * Prototypes
 *****/

/*****
 * Code
 *****/
void convert(int sec)
{
    char und_hr[50] = "0";

    int hr = floor(sec/3600);
    char hour[50];
    sprintf(hour, "%d", hr);
    if(strlen(hour) < 2) PRINTF(strcat(und_hr, hour));
    else PRINTF(hour);
    PRINTF(":");

    char und_min[50] = "0";
    sec = sec - hr * 3600;
    int min = floor(sec/60);
    char minute[50];
    sprintf(minute, "%d", min);
    if(strlen(minute) < 2) PRINTF(strcat(und_min, minute));
    else PRINTF(minute);
    PRINTF(":");

    char und_sec[50] = "0";
    sec = sec - min * 60;
    char second[50];
    sprintf(second, "%d", sec);
    if(strlen(second) < 2) PRINTF(strcat(und_sec, second));
    else PRINTF(second);
}

void SysTick_Handler(void)
{
    if (g_systickCounter != 0U) g_systickCounter--;
}

void SysTick_DelayTicks(uint32_t n)
{
    g_systickCounter = n;
    while (g_systickCounter != 0U) {}
}

int main(void)
{
    char ch;

```

```
BOARD_InitBootPins();  
BOARD_InitBootClocks();  
BOARD_InitDebugConsole();
```

```
    if (SysTick_Config(SystemCoreClock / 1000U))  
    {  
        while (1)  
        {  
        }  
    }
```

```
int count = 0;  
while (1)  
{  
    if(count%5 == 0) {  
        convert(count);  
        PRINTF("\n");  
    }  
    SysTick_DelayTicks(1000U);  
    count++;  
}
```

```
}
```