

Real-Time and Embedded Systems Design – Lab MISRA Report Submission

Team 17

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First Warning

"./main.c", line 62: warning #1383-D: (MISRA-C:2004 8.1/R) Functions shall have prototype declarations and the prototype shall be visible at both the function definition and call

Move function SysTick_Handler above main instead of below main

Second warning

"./main.c", line 61: warning #1421-D: (MISRA-C:2004 16.8/R) All exit paths from a function with non-void return type shall have an explicit return statement with an expression (function "main")

Add return 0 to end of the main function

Third Warning

"./main.c", line 53: warning #1464-D: (MISRA-C:2004 10.6/R) A "U" suffix shall be applied to all constants of unsigned type

Added U to the end of each unsigned int variable's value.

```
SYSCTL_RCGCGPIO_R=0x20U;  
GPIO_PORTF_DIR_R=0x0EU;  
GPIO_PORTF_DEN_R=0x0EU;  
NVIC_ST_RELOAD_R=0xFFFFFU;
```

Fourth Warning

"./main.c", line 46: warning #1420-D: (MISRA-C:2004 16.5/R) Functions with no parameters shall be declared and defined with the parameter list void

Added (void) as a parameter inside main function and SysTick Handler (void)

Fifth Warning

"./main.c", line 39: warning #1397-D: (MISRA-C:2004 10.5/R) If the bitwise operators ~ and << are applied to an operand of underlying type unsigned char or unsigned short, the result shall be immediately cast to the underlying type of the operand

Added (uint_32) to the value of GPIO_PORTF_DATA_R

```
GPIO_PORTF_DATA_R &= ((uint32_t)~LED_RED);
```