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

Team 17

Eman Khaled 18P9713

Omar Hussien 18P1265

Farah Essam 18P3448

Mohamed Mostafa 18P9474

Shehab El Din Adel 18P3863

# 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=0xFFFFFFU;

# 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 (unint\_32) to the value of GPIO\_PORTF\_DATA\_R

GPIO\_PORTF\_DATA\_R &= ((uint32\_t)~LED\_RED);