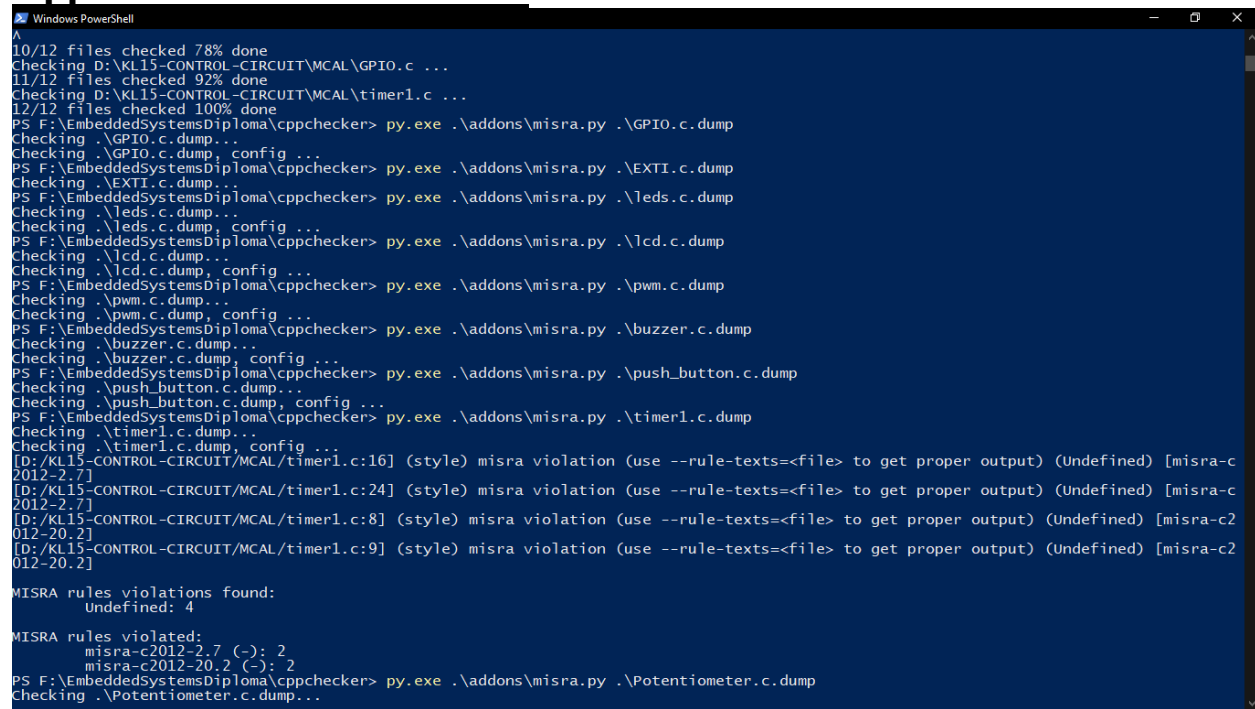# KL15 CONTROL CIRCUIT (Misra-2012)

After checking our application using cppchecker tool and modifying the code to achieve the MISRA 2012 rules, we can say that our application has only five MISRA 2012 violations as you can see from the screenshot.

Cppchecker tool screenshot:

```
Windows PowerShell                                                               —  □  X
PS F:\EmbeddedSystemsDiploma\cppchecker> py.exe .\addons\misra.py .\timer1.c.dump
Checking .\timer1.c.dump...
Checking .\timer1.c.dump, config ...
[D:/KL15-CONTROL-CIRCUIT/MCAL/timer1.c:16] (style) misra violation (use --rule-texts=<file> to get proper output) (Undefined) [misra-c
2012-2.7]
[D:/KL15-CONTROL-CIRCUIT/MCAL/timer1.c:24] (style) misra violation (use --rule-texts=<file> to get proper output) (Undefined) [misra-c
2012-2.7]
[D:/KL15-CONTROL-CIRCUIT/MCAL/timer1.c:8] (style) misra violation (use --rule-texts=<file> to get proper output) (Undefined) [misra-c2
012-20.2]
[D:/KL15-CONTROL-CIRCUIT/MCAL/timer1.c:9] (style) misra violation (use --rule-texts=<file> to get proper output) (Undefined) [misra-c2
012-20.2]

MISRA rules violations found:
        Undefined: 4

MISRA rules violated:
        misra-c2012-2.7 (-): 2
        misra-c2012-20.2 (-): 2
PS F:\EmbeddedSystemsDiploma\cppchecker> py.exe .\addons\misra.py .\Potentiometer.c.dump
Checking .\Potentiometer.c.dump...
Checking .\Potentiometer.c.dump, config ...
PS F:\EmbeddedSystemsDiploma\cppchecker> py.exe .\addons\misra.py .\Timers.c.dump
Checking .\Timers.c.dump...
Checking .\Timers.c.dump, config ...
PS F:\EmbeddedSystemsDiploma\cppchecker> py.exe .\addons\misra.py .\main.c.dump
Checking .\main.c.dump...
Checking .\main.c.dump, config ...
PS F:\EmbeddedSystemsDiploma\cppchecker> py.exe .\addons\misra.py .\ADC.c.dump
Checking .\ADC.c.dump...
Checking .\ADC.c.dump, config ...
[D:/KL15-CONTROL-CIRCUIT/MCAL/ADC.c:113] (style) misra violation (use --rule-texts=<file> to get proper output) (Undefined) [misra-c20
12-2.7]

MISRA rules violations found:
        Undefined: 1

MISRA rules violated:
        misra-c2012-2.7 (-): 1
PS F:\EmbeddedSystemsDiploma\cppchecker>
```

Rule-number	Number of violations	Rule-Description	Our-violations	Classification
R.2.7	3 times	There should be no unused parameters in functions	Because of using the ISR(INT-vect){ }	Advisory not mandatory
R.20.2	2 times	The ', " or \ characters and the /* or // character sequences shall not occur in a header file name	Because of using #include <avr\interrupt.h> #include <avr\io.h>	Required but not mandatory