
Release Notes for the MISRA-C:2004 Compliance Module

M2CM-2.3-QAC-7.1

March 2008

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Overview

Additional messages have been added providing improved enforcement of the following rules:

- 6.5
 - 8.3
 - 13.4
 - 14.3
 - 15.0
 - 16.3
 - 16.9
 - 19.12
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Implementation Changes

Rule	Rule Text	Notes
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|-------|---|--|
| 1.1 | All code shall conform to ISO 9899:1990 C programming language, ISO 9899, amended and corrected by ISO/IEC 9899/COR1:1995, ISO/IEC 9899/AMD1:1995, and ISO/IEC 9899/COR2: 1996 | Messages 0320, 0633, 0945, 1001, 1002, 1034, 1035, 1036, 1037, 1038, 1041, 1051, 1052, 1053, 1054 added. |
| 3.1 | All usage of implementation-defined behaviour shall be documented. | Messages 0274, 0292, 0299 added. |
| 6.5 | Bit fields of type signed int shall be at least 2 bits long. | Message 3665 added. |
| 8.3 | For each function parameter the type given in the declaration and definition shall be identical, and the return types shall also be identical. | Messages 0606, 0624 added. |
| 8.5 | There shall be no definitions of objects or functions in a header file. | Message 3480 added. |
| 10.1 | The value of an expression of integer type shall not be implicitly converted to a different underlying type if: a) it is not a conversion to a wider integer type of the same signedness, or b) the expression is complex, or c) the expression is not constant and is a function argument, or d) the expression is not constant and is a return expression | Message 274 removed. Messages 3908, 3909, 3910 added. |
| 13.4 | The controlling expression of a for statement shall not contain any objects of floating type. | Message 3342 added. |
| 14.1 | There shall be no unreachable code. | Message 2018 removed. |
| 14.2 | All non-null statements shall either (i) have at least one side-effect however executed, or (ii) cause control flow to change. | Message 3404 removed. |
| 14.3 | Before preprocessing, a null statement shall only occur on a line by itself; it may be followed by a comment provided that the first character following the null statement is a white-space character. | Message 3138 added. Message 3109 removed. |
| 14.6 | For any iteration statement there shall be at most one break statement used for loop termination. | Message 3333 removed. |
| 15.0 | The case and default clauses in the body of a switch statement shall not be preceded by declarations or definitions. | Message 3234 added. |
| 15.2 | An unconditional break statement shall terminate every non-empty switch clause. | Message 2020 added. |
| 16.3 | Identifiers shall be given for all of the parameters in a function prototype declaration. | Messages 1335, 1336 added. |
| 16.9 | A function identifier shall only be used with either a preceding &, or with a parenthesised parameter list, which may be empty. | Message 3635 added. Message 0428 removed. |
| 19.12 | There shall be at most one occurrence of the # or ## preprocessor operators in a single macro definition. | Message 0884 added. |

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