



PC-lint / FlexeLint Support for MISRA C 2012

The charts below are based on `au-misra3.lnt`, our configuration file for MISRA 2012 which is for use with PC-lint / FlexeLint version 9.00L and later. Although we have taken great care in creating this chart, we make no guarantees as to its completeness and accuracy. If you find any discrepancies or errors, please send an email to “sales” at “gimpel.com” with the details.

MISRA C 2012 Directives

	Fully Supported	Partially Supported	Not Statically Checkable	Not Yet Checked	Totals
Required Rules	2	3	4	0	9
Advisory Rules	4	2	1	0	7
Totals	6	5	5	0	16

Directive	Category	Decidable	Supported	Notes
1.1	req	No	n/a	Not Statically Checkable.
2.1	req	No	n/a	Not Statically Checkable.
3.1	req	No	n/a	Not Statically Checkable.
4.1	req	No	n/a	Not Statically Checkable.
4.2	adv	No	n/a	Not Statically Checkable.
4.3	req	No	Partial	Rule is not decidable but assistance is provided.
4.4	adv	No	Yes	Rule deemed not decidable but checking is supported.
4.5	adv	No	Yes*	Rule deemed not decidable but checking is supported. *Checking of this directive is disabled by default, see <code>au-misra3.lnt</code> for instructions to enable the checking.
4.6	adv	No	Yes	Rule deemed not decidable but checking is supported.
4.7	req	No	Yes	Rule deemed not decidable but checking is supported.
4.8	adv	No	Yes	Rule deemed not decidable but checking is supported.
4.9	adv	No	Partial	Rule is not decidable but assistance is provided.
4.10	req	No	Yes	Rule deemed not decidable but checking is supported.
4.11	req	No	Partial	Rule is not decidable but assistance is provided.
4.12	req	No	Partial	Rule is not decidable but assistance is provided.
4.13	adv	No	Partial	Rule is not decidable but assistance is provided.

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MISRA C 2012 Rules

	Decidable			Undecidable			Totals
	Fully Supported	Partially Supported	Not Yet Checked	Fully Supported	Partially Supported	Not Yet Checked	
Required Rules	70	10	3	9	8	1	101
Advisory Rules	24	4	0	2	1	1	32
Mandatory Rules	4	0	0	2	2	2	10
Totals	98	14	3	13	11	4	143

Rule	Category	Decidable	Supported	Notes
1.1	req	No	Partial	Rule is not decidable but assistance is provided.
1.2	adv	No	Partial	Rule is not decidable but assistance is provided.
1.3	req	No	Partial	Rule is not decidable but assistance is provided.
2.1	req	No	Yes	Rule deemed not decidable but checking is supported.
2.2	req	No	Yes	Rule deemed not decidable but checking is supported.
2.3	adv		Yes	
2.4	adv		Yes	
2.5	adv		Yes	
2.6	adv		Yes	
2.7	adv		Yes	
3.1	req		Yes	
3.2	req		Yes	
4.1	req		Yes	
4.2	adv		Yes	
5.1	req		Yes	
5.2	req		Yes	
5.3	req		Yes	
5.4	req		Yes	
5.5	req		No	
5.6	req		Partial	Uniqueness is not checked across all scopes and name spaces.
5.7	req		Partial	Uniqueness is not checked across all scopes and name spaces.
5.8	req		No	
5.9	adv		Partial	Uniqueness is not checked across all name spaces and translation units.
6.1	req		Yes	
6.2	req		Yes	
7.1	req		Yes	
7.2	req		Yes	
7.3	req		Yes	
7.4	req		Yes	
8.1	req		Yes	

Rule	Category	Decidable	Supported	Notes
8.2	req		Yes	
8.3	req		Partial	Differing names and top-level qualifiers in function declarations are not reported.
8.4	req		Yes	
8.5	req		Yes	
8.6	req		Yes	
8.7	adv		Yes	
8.8	req		Yes	
8.9	adv		Yes	
8.10	req		Yes	
8.11	adv		Yes	
8.12	req		Yes	
8.13	adv	No	Yes	Rule deemed not decidable but checking is supported.
8.14	req		Yes	
9.1	mand	No	Partial	Rule is not decidable but assistance is provided.
9.2	req		Yes	
9.3	req		Yes	
9.4	req		Yes	
9.5	req		Yes	
10.1	req		Yes	
10.2	req		Yes	
10.3	req		Yes	
10.4	req		Partial	
10.5	adv		Yes	
10.6	req		Yes	
10.7	req		Yes	
10.8	req		Yes	
11.1	req		Yes	
11.2	req		Yes	
11.3	req		Yes	
11.4	adv		Yes	
11.5	adv		Yes	
11.6	req		Yes	
11.7	req		Yes	
11.8	req		Yes	
11.9	req		Yes	
12.1	adv		Partial	False positives and false negatives from edge cases.
12.2	req	No	Yes	Rule deemed not decidable but checking is supported.
12.3	adv		Yes	
12.4	adv		Partial	False positive when overflow occurs during the evaluation of <code>const</code> expression.
13.1	req	No	Yes	Rule deemed not decidable but checking is supported.
13.2	req	No	Yes	Rule deemed not decidable but checking is supported.

Rule	Category	Decidable	Supported	Notes
13.3	adv		Partial	
13.4	adv		Yes	
13.5	req	No	Yes	Rule deemed not decidable but checking is supported.
13.6	mand		Yes	
14.1	req	No	Partial	Rule is not decidable but assistance is provided.
14.2	req	No	Yes	Rule deemed not decidable but checking is supported.
14.3	req	No	Partial	Rule is not decidable but assistance is provided.
14.4	req		Yes	
15.1	adv		Yes	
15.2	req		Yes	
15.3	req		Yes	
15.4	adv		Yes	
15.5	adv		Yes	
15.6	req		Yes	
15.7	req		Yes	
16.1	req		Yes	
16.2	req		Yes	
16.3	req		Yes	
16.4	req		Yes	
16.5	req		Yes	
16.6	req		Yes	
16.7	req		Yes	
17.1	req		Partial	The use of the <code>va_list</code> type is not diagnosed.
17.2	req	No	Yes	Rule deemed not decidable but checking is supported.
17.3	mand		Yes	
17.4	mand		Yes	
17.5	adv	No	No	
17.6	mand		Yes	
17.7	req		Yes	
17.8	adv	No	Yes	Rule deemed not decidable but checking is supported..
18.1	req	No	Partial	Rule is not decidable but assistance is provided.
18.2	req	No	Partial	Rule is not decidable but assistance is provided.
18.3	req	No	Partial	Rule is not decidable but assistance is provided.
18.4	adv		Yes	
18.5	adv		Yes	
18.6	req	No	Partial	Rule is not decidable but assistance is provided.
18.7	req		Yes	
18.8	req		Yes	
19.1	mand	No	No	
19.2	adv		Yes	
20.1	adv		Yes	
20.2	req		Yes	
20.3	req		Yes	

Rule	Category	Decidable	Supported	Notes
20.4	req		Yes	
20.5	adv		Yes	
20.6	req		Yes	
20.7	req		Yes	
20.8	req		Yes	
20.9	req		Yes	
20.10	adv		Yes	
20.11	req		Yes	
20.12	req		Yes	
20.13	req		Partial	Conditionally excluded source code is not checked.
20.14	req		Partial	Only cases where an <code>#if</code> is started in one header file and completed in another are diagnosed.
21.1	req		Yes	
21.2	req		No	
21.3	req		Yes	
21.4	req		Partial	Use of the <code>jmp_buf</code> type is not diagnosed.
21.5	req		Partial	Use of the <code>sig_atomic_t</code> type is not diagnosed.
21.6	req		Yes	
21.7	req		Yes	
21.8	req		Yes	
21.9	req		Yes	
21.10	req		Partial	Use of types defined in <code>signal.h</code> are not diagnosed.
21.11	req		Yes	
21.12	adv		Yes	
22.1	req	No	Yes	Rule deemed not decidable but checking is supported.
22.2	mand	No	Partial	Rule is not decidable but assistance is provided.
22.3	req	No	No	
22.4	mand	No	No	
22.5	mand	No	Yes	Rule deemed not decidable but checking is supported.
22.6	mand	No	Yes	Rule deemed not decidable but checking is supported.