29 July 2006 J3/06-253

Subject: Comment on IEEE_VALUE

From: Van Snyder

1 1 Introduction

2 The IEEE Standard allows a processor to convert a signaling NaN to a quiet NaN if it is involved in an

- 3 operation. This compromises the functionality of IEEE_VALUE. The standard should recommend that
- 4 producing the function result should not be considered to be an operation.

5 2 Edits

- 6 Edits refer to 06-007. Page and line numbers are displayed in the margin. Absent other instructions, a
- 7 page and line number or line number range implies all of the indicated text is to be replaced by associated
- 8 text, while a page and line number followed by + (-) indicates that associated text is to be inserted after
- 9 (before) the indicated line. Remarks are noted in the margin, or appear between [and] in the text.

466:16+

NOTE 14.12a

It is recommended that the result of IEEE_VALUE is produced in such a way that the processor does not raise IEEE_INVALID or instantly convert a signaling NaN to a quiet NaN, especially if the reference is an actual argument, an output item, or the *expr* in an assignment statement. Depending upon the processor, this may require avoiding use of floating-point registers.

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