

Subject: Operators with directed rounding
From: Van Snyder

1 **Number**

2 TBD

3 **Title**

4 Operators with directed rounding.

5 **Submitted By**

6 J3

7 **Status**

8 For consideration.

9 **Basic Functionality**

10 Provide a more terse way, based on operators, to specify the direction of rounding for floating-point
11 operations.

12 **Rationale**

13 The procedures in the IEEE modules allow to specify the direction of rounding as a mode. For archi-
14 tectures that control rounding with a field in an instruction, as opposed to a flag in the floating-point
15 arithmetic unit, this is a disaster.

16 **Estimated Impact**

17 Minor. A few changes in Section 7.

18 **Detailed Specification**

19 Provide a more terse way, based on operators, to specify the direction of rounding for floating-point
20 operations. It has been suggested that this be done by < and >, either as prefixes or suffixes, for the
21 five operations +, -, *, / and **.

22 **History**