Subject: Operators with directed rounding
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Number

TBD

Title

Operators with directed rounding.

Submitted By

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Status

For consideration.

Basic Functionality

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

Rationale

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

Estimated Impact

Minor. A few changes in Section 7.

Detailed Specification

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

History