

WG14 N2296

C Floating Point Study Group Teleconference

September 25, 2018
8 AM PDT / 11 PM EDT / 3 PM UTC

Conference ID: 82968194
Toll-free Dial-in number: 1-888-426-6840
Other (International) Dial In Numbers:
<https://www.teleconference.att.com/servlet/glbAccess?process=1&accessCode=82968194&accessNumber=2158616239#C3>
Wiki: <http://wiki.edg.com/twiki/bin/login/CFP/WebHome>

Draft Agenda

Meeting logistics

Note taker, mail out notes - Rajan

Introduction of attendees

Approval of agenda

Notes from 2018-08-28 meeting

Posted on CFP wiki

Carry-over action items

Ian: See if there is an incompatibility between C and C++ for constants being evaluated to a wider format (Ex. FLT_EVAL_METHOD affects constants in C++, and wider return values) - Keep open.

Jim: Update the binding table in parts 1 and 2 to handle the new IEEE-754:2018 functions when published.

David: Check the min/max C specification to ensure it matches what IEEE has.

David: Check the augmented* C function specifications to ensure they match what IEEE has.

Action items from 2018-08-28 meeting

Jim: Remove for quantum specification: "If x is NaN, the result is NaN"

Jim: Make the change to specify F.10.10a part 1 append as per Jim's binding meeting minutes email on 2018/08/23.

All: totalorder* differ for NaN payloads: Note that we don't have approval to move up to 754 201x yet. Revisit after we move up to the 754 draft.

Fred: See which other functions have the need to not trigger signaling NaNs but are functions (need to be macros or have pointer parameters).

All: Look into comparison macros and how to work them to avoid SNaN's from signaling.

Jim: Create a part 1 CR to make the totalorder* functions take pointer arguments.

David: Look into the identity conflicts for sqrt and rootn in IEEE.

Jim: Part 4: Make the change as per Jim's 2018/06/26 email about specification for inexact with making the required operations raise inexact IFF it is inexact.

Jim: Part 1: Make the changes to next* as per Jim's email on 2018/08/20.

Fred: Give reference to the C DR for normalized double double meaning bits can be changed.

Study group logistics

Next meeting date: Tuesday, October 23?

IEEE 754 revision

C++ liaison

Action item details

Min/max C specification matches IEEE?

Augmented* C function specifications match IEEE?

Remove for quantum specification: "If x is NaN, the result is NaN".

See Jim's 9/3 email "Als to update working drafts"

<http://wiki.edg.com/pub/CFP/WebHome/cfp2x-20180903.pdf>

Make the change to specify F.10.10a part 1 append as per Jim's binding meeting minutes email on 2018/08/23.

See Jim's 9/3 email "Als to update working drafts"

<http://wiki.edg.com/pub/CFP/WebHome/cfp1x-20180903.pdf>

See which other functions have the need to not trigger signaling NaNs but are functions (need to be macros or have pointer parameters).

See Fred's 8/28 email "Not trigger sNaN" and responses

Look into comparison macros and how to work them to avoid SNaN's from signaling.

Create a part 1 CR to make the totalorder* functions take pointer arguments.

<http://wiki.edg.com/pub/CFP/WebHome/n2292.pdf>

See also Joseph Myers 9/11 email "(SC22WG14.15517) totalorder and tgmth.h"

Look into the identity conflicts for sqrt and rootn in IEEE.

Part 4: Make the change as per Jim's 2018/06/26 email about specification for inexact with making the required operations raise inexact IFF it is inexact.

See Jim's 9/3 email "Als to update working drafts"

<http://wiki.edg.com/pub/CFP/WebHome/cfp4x-20180903.pdf>

Part 1: Make the changes to next* as per Jim's email on 2018/08/20.

See Jim's 9/3 email "Als to update working drafts"

<http://wiki.edg.com/pub/CFP/WebHome/cfp1x-20180903.pdf>

Give reference to the C DR for normalized double double meaning bits can be changed.

See Fred's 8/28 email "Normalized numbers"

WG14 Oct 15-18 meeting prep

C2x integration

Other issues?

Activities

Review activities in progress

Deferred issues

C standard use of “floating” vs “floating-point”