

WG14 N2340

C Floating Point Study Group Teleconference

February 20, 2019

8 AM PST / 11 PM EST / 4 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 2019-01-24 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).

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.

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.

Action items from 2019-01-24 meeting

Jim: Post the draft of Part 1 integrated into C2x on the CFP site.

Jim: Make the first change as per CFP1238.

Jim: Rework Part 3 as an Annex to add a note saying there is no _Decimal32x since IEC60559 doesn't have _Decimal32 as a basic type.

Jim: Make the _EPSILON change as per CFP1238.

Jim: Make the fourth change as per CFP1238 to add in the hyperbolic versions of cos/sin/tan.

Jim: Make the fifth change as per CFP1238 for the list changes.

All: Take a look at part 3 annex (<http://wiki.edg.com/pub/CFP/WebHome/cfp3x-annex-20190119.pdf>) draft before next meeting.

Jim: Update the proposal to try again to integrate part 4a into C2X.

David: Check with IEEE group to see if there is any implementations for Part 4b functions (hardware or software).

All: Review the rationale for part 5 a, b, c proposal.

All: Review http://wiki.edg.com/pub/CFP/WebHome/update_for_C2X_payload_functions.pdf.

Rajan: Say to WG14 that CFP supports removing the WANT macros and leaving the rest as is due to Fred's reasoning above.

Rajan: Check with David to see if we are going to discuss the WANT macro issue on the agenda.

Fred: Send links to papers of interest to CFP from N2319-N2323.

Study group logistics

Next meeting dates: Tuesday, March 19?

IEEE 754 revision

C++ liaison

C2x integration

Part 1

Part 2

Part 3

Part 4ab

Part 5abcd

Action item details

Jim: Post the draft of Part 1 integrated into C2x on the CFP site.

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

<http://wiki.edg.com/pub/CFP/WebHome/all-diffC2x.pdf>

newer one

Regarding Part 3 as annex ...

Jim: Make the first change as per CFP1238.

Jim: Rework Part 3 as an Annex to add a note saying there is no `_Decimal32x` since IEC60559 doesn't have `_Decimal32` as a basic type.

Jim: Make the `_EPSILON` change as per CFP1238.

Jim: Make the fourth change as per CFP1238 to add in the hyperbolic versions of `cos/sin/tan`.

Jim: Make the fifth change as per CFP1238 for the list changes.

All: Take a look at part 3 annex (<http://wiki.edg.com/pub/CFP/WebHome/cfp3x-annex-20190119.pdf>) draft before next meeting.

Updated draft:

<http://wiki.edg.com/pub/CFP/WebHome/cfp3x-annex-20190205.pdf>

Jim: Update the proposal to try again to integrate part 4a into C2X.

David: Check with IEEE group to see if there is any implementations for Part 4b functions (hardware or software).

All: Review the rationale for part 5 a, b, c proposal.

All: Review http://wiki.edg.com/pub/CFP/WebHome/update_for_C2X_payload_functions.pdf.

Rajan: Say to WG14 that CFP supports removing the WANT macros and leaving the rest as is due to Fred's reasoning above.

See Rajan and Fred's email CFP 1242, 1243, 1244.

See WG14 email 15982 – 15983, 15985.

Rajan: Check with David to see if we are going to discuss the WANT macro issue on the agenda.

Fred: Send links to papers of interest to CFP from N2319-N2323.
See Fred's email CFP 1246.

Other issues

Unary operators. See Fred's email CFP 1249 and 1253.

Initialization with signaling NaN macros. See Fred and Jim's email CFP 1247, 1250.

Others?

Activities

Review activities in progress