C Floating Point Study Group Teleconference

May 22, 2018
9 AM PDT / 12 PM EDT

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 2018-04-10 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 (Hubert: Not defined and left up to C)
Jim: Update the binding table in parts 1 and 2 to handle the new IEEE-754:2018 functions when published.
Jim: Re-update activities list.
Fred: http://wiki.edg.com/pub/CFP/WebHome/in_flight-20180313.pdf See where we are for inconsistent spec for infinities.

Action items from 2018-04-10 meeting
Jim: Look at what is said in exception handling and make sure remainder underflow is addressed as per Jim's/Fred/David's email regarding 18661-1 and 754 (2018/04/09).
Jim: 754 compatibility: roundeven: Put in the parenthetical (conclusion) into part 1 as per Jim's response to David on the 2018/04/09 email.
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.
David: Evaluate the 18661-4 tanpi and ensure it is not a bad idea. Also ask 754 what we (CFP) should do with it.
All: Look at Fred's 2018/02/19 email titled "18661-2 and 754".
Jim: Integrate the 2018/04/05 DR13 change into N2213 and get a new N document so we can talk to that in WG14.
Jim: Part 4: Change the exp10m1 description to allow underflow range errors.

**Study group logistics**
Next meeting date: Tuesday, June 19?

**WG14 Spring 2018 meeting**
Rajan’s April 26 email “WG14 Spring 2018 meeting summary for C FP”

**IEEE 754 revision**

**C++ liaison**

**Action item details**
Exception handling and remainder underflow
Jim’s May 8 email “AI about remainder underflow”

Editorial change for roundeven, in part 1

Min/max C specification matches IEEE?

Augmented* C function specifications match IEEE?

754 input about whether to keep tanpi

Fred’s 2018/02/19 email "18661-2 and 754"

2018/04/05 CR13 change and N2213

Change for exp10m1 to allow underflow range errors

Consistency for infinities

**Other issues**
From WG14: CFP to come back with: a new suggested C11-only change based on CFP DR20 for C DR501; and TS-only changes in CFP DR20.

WG14 process for CFP CRs

**Binding for IEEE 754-2018**
WG14 paper about updating to IEEE 754:2018
Functions for augmented arithmetic
Min/max functions
Payload functions
Total order functions

**C2x integration**

**Activities**
Review activities in progress

**Deferred issues**
C standard use of “floating” vs “floating-point”