

WG14 N2637

C Floating Point Study Group Teleconference

January 13, 2021

11:00 AM EST, 8:00 AM PST, 4:00 PM UTC

Join from PC, Mac, Linux, iOS or Android:

<https://iso.zoom.us/j/97059857315?pwd=QjFkTXhidUJsUnJiRU95bUxuY1hYZz09>

Password: 807862

Or iPhone one-tap :

US: +16699006833,,97059857315# or +14086380968,,97059857315#

Or Telephone:

Dial(for higher quality, dial a number based on your current location):

US: +1 669 900 6833 or +1 408 638 0968 or +1 346 248 7799 or +1 253 215 8782 or +1 312 626 6799 or +1 646 876 9923 or +1 301 715 8592 or 877 853 5247 (Toll Free)

Meeting ID: 970 5985 7315

Password: 807862

International numbers available: <https://iso.zoom.us/u/aURY4jbs2>

Or Skype for Business (Lync):

<https://iso.zoom.us/skype/97059857315>

CFP Wiki: <http://wiki.edg.com/twiki/bin/login/CFP/WebHome>

Draft Agenda

Meeting logistics

Note taker, mail out notes

Introduction of attendees

Approval of agenda

Notes from 2020-11-25 meeting

Posted on CFP wiki

Carry-over action items

none

Action items from 2020-11-25 meeting

Fred: Redo updates to N2546 with the changes in CFP 1859.

Jim: Give a short summary of differences between N2579 and N2601 (differences between TS part 3 as an Annex updates 2 and 3).

Fred: Update the example in G.5.1 using fmax to use the newer functions as a new proposal.

Rajan: Respond to the WG14 reflector message to say CFP wants equivalence to strtod and hence we don't want to parse digit separators either.

Fred: Write a WG14 editorial informational paper as per CFP 1821.

Fred: Write a CFP paper for the pow(1,NaN) and the compound(NaN, 0) case with respect to quantum exponent of the result.

David H: Look into 'numerically equivalent' vs 'numerically equal' usage in the C standard and revisit CFP 1849.

Fred/Jim: Have a statement in the main body of the standard saying opposite signed zeros compare equal.

Fred: Change 'negative' to say 'less than zero' in certain cases in C.

Jim: Send out something to say negative zero and NaN's with a negative sign bit are not negative values in C.

Jim: Reword the signbit description in C.

Study group logistics

Next meeting dates: Wednesday, February 17?

C++ liaison

WG14 meeting report

- [\[Cfp-interest 1868\] WG14 CFP summary](#) *Rajan Bhakta*

C23 integration

Latest C2X drafts:

<http://www.open-std.org/jtc1/sc22/wg14/www/docs/n2596.pdf>

<http://www.open-std.org/jtc1/sc22/wg14/www/docs/n2573.pdf>

<http://www.open-std.org/jtc1/sc22/wg14/www/docs/n2478.pdf>

Part 1

Part 2

Part 3

Part 4ab

Part 5abcd

IEC 60559:2020 support

Action item details

Fred: Redo updates to N2546 with the changes in CFP 1859.

- [\[Cfp-interest 1869\] DEC_EVAL_METHOD](#) *Fred J. Tydeman*

Jim: Give a short summary of differences between N2579 and N2601 (differences between TS part 3 as an Annex updates 2 and 3).

- [\[Cfp-interest 1867\] AI to list latest changes in TS part 3 as annex](#) *Jim Thomas*

Fred: Update the example in G.5.1 using fmax to use the newer functions as a new proposal.

Rajan: Respond to the WG14 reflector message to say CFP wants equivalence to strtod and hence we don't want to parse digit separators either.

Fred: Write a WG14 editorial informational paper as per CFP 1821.

- [\[Cfp-interest 1870\] +\(x\)](#) *Fred J. Tydeman*

Fred: Write a CFP paper for the pow(1,NaN) and the compound(NaN, 0) case with respect to quantum exponent of the result.

- [\[Cfp-interest 1872\] Quantum exponent of NaN](#) *Fred J. Tydeman*

David H: Look into 'numerically equivalent' vs 'numerically equal' usage in the C standard and revisit CFP 1849.

Fred/Jim: Have a statement in the main body of the standard saying opposite signed zeros compare equal.

- [\[Cfp-interest 1866\] AI for unsigned zeros to compare equal](#) *Jim Thomas*

Fred: Change 'negative' to say 'less than zero' in certain cases in C.

- [\[Cfp-interest 1871\] Negative](#) *Fred J. Tydeman*

Jim: Send out something to say negative zero and NaN's with a negative sign bit are not negative values in C.

Jim: Reword the signbit description in C.

Other issues

Signaling NaNs

- [\[Cfp-interest 1874\] SNAN issues](#) *Fred J. Tydeman*
 - [\[Cfp-interest 1875\] Re: SNAN issues](#) *Ian McIntosh*
 - [\[Cfp-interest 1876\] Re: SNAN issues](#) *Fred J. Tydeman*

Range errors

- [\[Cfp-interest 1841\] C math errors](#) *Jim Thomas*
 - [\[Cfp-interest 1842\] Re: C math errors](#) *Fred J. Tydeman*
 - [\[Cfp-interest 1843\] Re: C math errors](#) *Jim Thomas*
- [\[Cfp-interest 1873\] Range error](#) *Fred J. Tydeman*

Parameterization of interfaces

TS 18661 revisions

- [\[Cfp-interest 1856\] TS 18661-4 revision](#) *Jim Thomas*

Others?