C Floating Point Study Group Teleconference

January 19, 2022
11:00 AM EDT, 8:00 AM PDT, 4:00 PM UTC

Join from PC, Mac, Linux, iOS or Android:
https://iso.zoom.us/j/96144852691?pwd=eEtqb3dkd3RqbWlOMGlvZlQ5VzZpUT09
   Password: 064105

Or iPhone one-tap :
   US: +14086380968,,96144852691# or +16692192599,,96144852691#
Or Telephone:
   Dial(for higher quality, dial a number based on your current location):
      US: +1 408 638 0968 or +1 669 219 2599 or +1 669 900 6833 or +1 213 338 8477 or +1 971 247 1195 or +1 206 337 9723 or +1 253 215 8782 or +1 346 248 7799 or +1 602 753 0140 or +1 720 928 9299 or +1 786 635 1003 or +1 267 831 0333 or +1 301 715 8592 or +1 312 626 6799 or +1 470 250 9358 or +1 470 381 2552 or +1 646 518 9805 or +1 646 876 9923 or +1 651 372 8299 or 888 788 0099 (Toll Free) or 877 853 5247 (Toll Free)
   Meeting ID: 961 4485 2691
   Password: 064105
   International numbers available: https://iso.zoom.us/u/ac2uWqIeRK

Or Skype for Business (Lync):
   https://iso.zoom.us/skype/96144852691

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 2021-12-22 meeting
   • [Cfp-interest 2297] WG14 IEEE 754-C binding meeting minutes 2021/11/23   *Rajan Bhakta*
Posted on CFP wiki

Study group logistics
   Next meeting date: Wednesday, February 9?

C++ liaison

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

Carry-over action items

Rajan: For CFP2291, update the color to be more readable and add in wcstod functions updates and refer to overflow/underflow in 7.12.1 if possible.

Fred: Ask C++ what their issues with *_HAS_SUBNORM are and if they are OK with obsoleting it.

Action items from 2021-12-22 meeting

Jim - submit [update to "normal"] to WG 14.
https://wiki.edg.com/pub/CFP/WebHome/n2881.pdf

Jim - submit [update to "max exponent macros"] to WG 14.
https://wiki.edg.com/pub/CFP/WebHome/n2882.pdf

Jim - [in update to 5.2.4.2.2] copy changes to footnote 22 into set of suggested changes to N2806+N2596.

Jim - [in update to 5.2.4.2.2] change the last item which says "are called zero floating-point numbers" to just "are zeros".

Jim - submit [update to 5.2.4.2.2] to WG 14, after making [two] changes above.
https://wiki.edg.com/pub/CFP/WebHome/n2879.pdf

Jim - [in update to "overflow"] change 7.12.11.5 nextup to match 11.6 nextdown as follows:
 If x is the positive number (finite or infinite) of maximum magnitude in the type, nextup(x) is x....
and submit to WG 14.
https://wiki.edg.com/pub/CFP/WebHome/n2880.pdf

Jim - track the many changes to infinity and nan macros.

Fred– add printf rounding issue in [Cfp-interest 2256] to list of issues to be revisited for next version.
All – review N2726 for next time.

Jim - send note to editor asking for editorial change in 7.12.7.3 "of a floating-point number x" to "of x".
Copy Rajan and Fred.

Anyone interested – review terminology introduced in 5.2.4.2.2 and report.
- [Cfp-interest 2258] terminology issues   *Vincent Lefevre*
  - [Cfp-interest 2263] Re: terminology issues   *Vincent Lefevre*
  - [Cfp-interest 2264] Fwd: terminology issues   *Jim Thomas*
    - o [Cfp-interest 2271] Re: Fwd: terminology issues   *Vincent Lefevre*

Other issues

Infinity and exceptions
- [Cfp-interest 2307] infinity and exceptions   *Fred J. Tydeman*

Correctly rounded math functions
- [Cfp-interest 2308] correctly rounded mathematical functions   *Paul Zimmermann*

Others