Subject: Unresolved issue 359 From: Van Snyder

1 **Introduction**

J3 internal note

Unresolved issue 359

While entering paper 02-149, I noticed that there were similar errors in 13.6, some dating back to f90. We should either fix them also or (my preference) delete the argument lists entirely from 13.6. That's not where anyone looks for argument lists. besides, deleting the argument lists would make the column headers (which just say these are names) correct.

 $_{\rm 2}~$ The argument lists in the table in 13.6 need to be retained. In the cases where the specific

 $_{3}$ function has a different name from the generic function, there is no listing in 13.7 for the specific

⁴ function. In the more extreme cases of AMAX0 etc., where the result type is different from

the result type of any of the listed generic functions that "do the same thing" and that have
the same type arguments as described in 13.6, a very different description would be needed if

6 the same type arguments as describe
7 argument lists were deleted.

⁸ The only differences between the argument lists given for specific functions that have the same

 $_{9}$ $\,$ name as corresponding generic functions, and the argument lists for those corresponding generic

 $_{10}$ $\,$ functions, are in cases where an optional KIND argument is permitted. In these cases, there is

¹¹ some question whether KIND ought to be included in the argument list for the specific function,

¹² as this appears to make it generic. The question is whether it does, in fact make it generic, ¹³ or it's just "weirdly special," i.e., the result kind depends on the *value*, not the *type and type* ¹⁴ normeters of an approximate.

14 parameters of an argument.

¹⁵ If the KIND argument ought not to be included, it should be deleted from the ICHAR argument

¹⁶ list. In this case, there is some question whether we need to have ICHAR, INT, or REAL listed

¹⁷ at all. After all, they are all marked with a bullet, so they cannot be used as actual arguments ¹⁸ or as the *proc-target* in a pointer assignment statement, and they all have the same specific

¹⁹ name as the generic name.

20 If it ought to be included, it ought to be added to the argument lists for AINT, ANINT, INT,

LEN, NINT, and REAL. If it should be included, ought it to be optional?

22 Edits for both options are proposed.

An additional problem is that [72:16] asserts that the type of a specific intrinsic function is listed in 13.6. Only the argument types, not the result types, are given in 13.6.

²⁵ 2 Edits – No matter what needs to be done about KIND

Edits refer to 02-007r1. Page and line numbers are displayed in the margin. Absent other instructions, a page and line number or line number range implies all of the indicated text is to

28 be replaced by associated text, while a page and line number followed by + (-) indicates that

²⁹ associated text is to be inserted after (before) the indicated line. Remarks are noted in the

 $_{\rm 30}$ $\,$ margin, or appear between [and] in the text.

31 [Editor: Replace unresolved issue note 359 with the following:]

294:9+1-6

Except where the description of the generic reference form shows that an explicit INT or REAL

 $_{1}\,$ function is applied to the result of the MAX or MIN generic function, the result type of the

 $_{2}$ $\,$ specific function is the same as the result type of the corresponding generic function would be

 $_{3}$ if it were invoked with the same arguments as the specific function.

⁴ [Editor: Change column heading for "Specific Name" to "Specific Reference Form"; Change 294:9+7,
 ⁵ column heading for "Generic Name" to "Generic Reference Form".]

⁶ 3 Edits – Delete KIND argument from ICHAR

7 [Editor: Delete ", KIND" from both of the first two columns for the listing for the ICHAR 295
 8 function.]

9 3.1 Better yet ...

10 [Editor: Delete the entries for ICHAR, INT, and REAL.]

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11 4 Edits – Need the KIND argument

Question for J3 (not an edit):

12 Should the KIND argument be optional?

- $_{13}$ [Editor: After the paragraph added by the edit for [294:9+1-6] above, add another paragraph:] 294:9+6+6
- The type shown in the "Argument Type" column in the table below specifies the type of the arguments other than the KIND argument. The KIND argument is of type integer.

¹⁶ [Editor: Add ", KIND" at the end of the argument list in both of the first two columns for the 294

17 AINT and ANINT functions.]

18 [Editor: Add ", KIND" at the end of the argument list in both of the first two columns for the 295

¹⁹ INT, LEN, NINT, and REAL functions.]