Touchstone 2.1 Known Issues

The following is a list of known issues found in the Touchstone File Format Specification Version 2.1 document. These are editorial issues deemed to have no functional impact on the specification. Editorial issues with existing TSIRDs may also be included in this document. Functional issues are resolved through the IBIS Open Forum TSIRDs page at <https://app.ibis.org/tsirds/>.

All page numbers refer to the Adobe PDF version found at: <https://ibis.org/touchstone_ver2.1/touchstone_ver2_1.pdf>.

1. (from Curtis Clark, Ansys)

On bottom line of page 1 of TSIRD2.1, change [Binary] to [Noise Data] (similar to [Network Data]) to read:

The [Binary] keyword may appear only once under the [Network Data] keyword and only once under the [Noise Data] keyword.

1. (from Michael Mirmak, Intel)

The units for [Network Data] are entirely missing aside from frequencies in hertz.

1. (from Randy Wolff, Siemens EDA)

On page 7, in the Rules for Version 1.1 files section, the rules for 1- and 2-port files show option lines with “[R *n1 … np*]”. 1- and 2-port files would not have “*np*” ports. A suggested fix is:

For 1-port files: # [Hz|kHz|MHz|GHz] [S|Y|Z] [DB|MA|RI] [R *n*1]

For 2-port files: # [Hz|kHz|MHz|GHz] [S|Y|Z|G|H] [DB|MA|RI] [R *n*1 n*2*]

1. (from Arpad Muranyi, Siemens EDA)

At the top of page 8, there is a duplicate sentence to remove that is already in the last paragraph on page 7.

“Though specific cases are used for the units above and throughout this specification (e.g., “kHz”), Touchstone files are case-insensitive.”

Revision History

1.2: April 27, 2024

- Changed by Randy Wolff

- Added list item 4

1.1: February 21, 2024

- Changed by Randy Wolff

- Added list item 3

1.0: December 11, 2023

- Created by Randy Wolff