# IBIS QUALITY

# DESIGNCON IBIS SUMMIT Feb 2, 2004

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# IBIS Quality (IQ) Subcommittee

- Goals
  - Rating system that is easy to understand and adopt
  - Communicate to vendors/users.
  - Cover overall file, component, and model sections
  - Check for completeness, correctness, accuracy
  - Leverage of prior work Meet every 2 weeks (Tuesdays 9:00 EDT for 1 hour)
- Mailing list
  - Ibis-quality@freelists.org
  - http://www.freelists.org/archives/ibis-quality
- Web Site
  - http://www.sisoft.com/ibis-quality

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# IQ Document Available

- http://www.sisoft.com/ibis-quality/docs

- IQ_Document.txt

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# IQ Document Index

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# IQ Document Index

- 4.0 Model Section
-     4.1 Model General Requirements
-     4.2 Model Waveform Processing Requirements
-     4.3 Model I-V Table Requirements
-     4.4 Model V-T Table Requirements
-     4.5 Model Ramp Data Requirements

- 5.0 Possible Errors that should be checked

- 6.0 Correlation
-     6.1    SPICE correlation
-     6.2    Lab correlation
- 7.0 Model Limitations

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# IQ Document Sample

- 3.1 Component Package Requirements
  Requirements for the [Package] and [Package Model] sections:

- 3.1.1 {LEVEL 0} [Package] must have typical values
  Typical values must be defined on a component. Min/Max optional but must be defined as NA if not available.

- 3.1.2 {LEVEL 0} [Package] Parasitics must be reasonable
Reasonable values are: L < 10nH, C < 20pF, R < 1 ohm
Min must be less than typ and typ less than max

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# IQ Document Levels

- Level 0 requirements

Level 0 requirements can be checked by ibischk3 version 3.2.9 or later software. Use of ibischk3 is highly recommended, to avoid performing level 0 checks manually…

- Level 1 requirements

Level 1 includes all items in level 0, plus checks for correctness and completeness, and basic simulation tests…

- Level 2a requirements

Level 2a includes all items in level 1, plus simulation correlation:

- Spice Correlation.

- Cross reference IBIS Accuracy figure of merit (FOM)

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# Summary

- IBIS Quality Subcommittee Goals
- IBIS Quality Documentation Available !
  - http://www.sisoft.com/ibis-quality/docs
- IQ Index
- IQ Sample Documentation presented
- IQ Levels

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