# **IBIS** Quality Task Group Report

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### What Does the Task Group Do?

- Formed in 2002 to produce an IBIS model quality checklist that could be incorporated in procurement specifications
- Specification written to explain checklist items and provide a scoring system
- IBISCHK parser issues addressed (ongoing)
- Ideas developed but not completed:
  - IBIS Measurement and Correlation Handbook
  - [External Test Load] considered
- IBISCHK User Guide (in progress)



### **IBISCHK** Development

- Bob Ross leads most IBISCHK activities
  - Code development coordination
  - Source code delivery to purchasers
  - Executable releases to public
  - Bug tracking
- The IBIS Quality group helps
  - Bug review
  - Enhancement proposals
  - User guide development



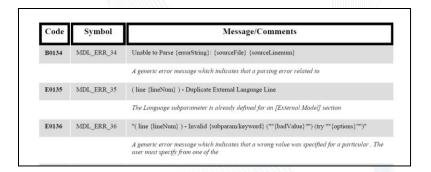
#### **IBISCHK6** User Guide

- First release will be for IBISCHK6
- 123 pages so far
  - How to use:

– Message descriptions:

# 2.1 INPUT FILE FLAGS The following option flags are required for files other than those in the .ibs format. -pkg Use this option if the file is in Define Package Model format, described in section 7 of the IBIS 6.0 Specification. -ebd Use this option if the file is in Electrical Board Description format, described in section 8 of the IBIS 6.0 Specification. -ami Use this option if the file is in Algorithmic Model Interface format, described in section 10.3 of the IBIS 6.0 Specification.

Note: if a top-level file calls other IBIS (IBS, PKG, EBD, and AMI) files, then all referenced files are checked with one call. For example, an EBD file can contain other EBD references and also IBS file references that reference both PKG files and also AMI files. The top-level EBD file check will imitiate checking for that EBD file plus checking for all referenced files. These referenced files could also be checked individually by using the appropriate input file flags.





### IBISCHK Message Cleanup

- 1,258 unique messages
- 303 have no explanatory comments at all
  - Message strings were extracted from source code beginning with IBISCHK5
  - Comments were added for new messages and only some existing messages
- About 50 explanatory comments added so far
  - Progress is slow, requires source code analysis
- Other comments just need more detail
- Work-in-progress document included with ibischk6
  - http://www.eda.org/ibis/ibischk6/



# Example: Message Detail Needed

Message W1503 ACDC\_ERR\_3 has no comment:

```
Model {model}: The [{Rise|Fall} Waveform] with
[R_fixture]={Rfixture} Ohms and
[{Vfixture}]={Typ|Min|Max}V has {VacLow} column DC
endpoints of {VacHigh}V and {percTol}v, but an equivalent
load applied to the model's I-V tables yields different
voltages ({VdcLow}V and {VdcHigh}V), a difference of
{diffLow}% and {diffHigh}%, respectively.
```

- The variable terms should be explained
- The percent thresholds for Warning (W1503, 2%) and Error (E1503, 10%) should be documented in the comments per BUG47



# Join IBIS Quality

Meetings are held Tuesdays at 08:00 PT

Web: <a href="http://www.eda.org/ibis/quality\_wip">http://www.eda.org/ibis/quality\_wip</a>

Email: <u>ibis-quality@freelists.org</u>

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