

The IBIS Model Review Committee

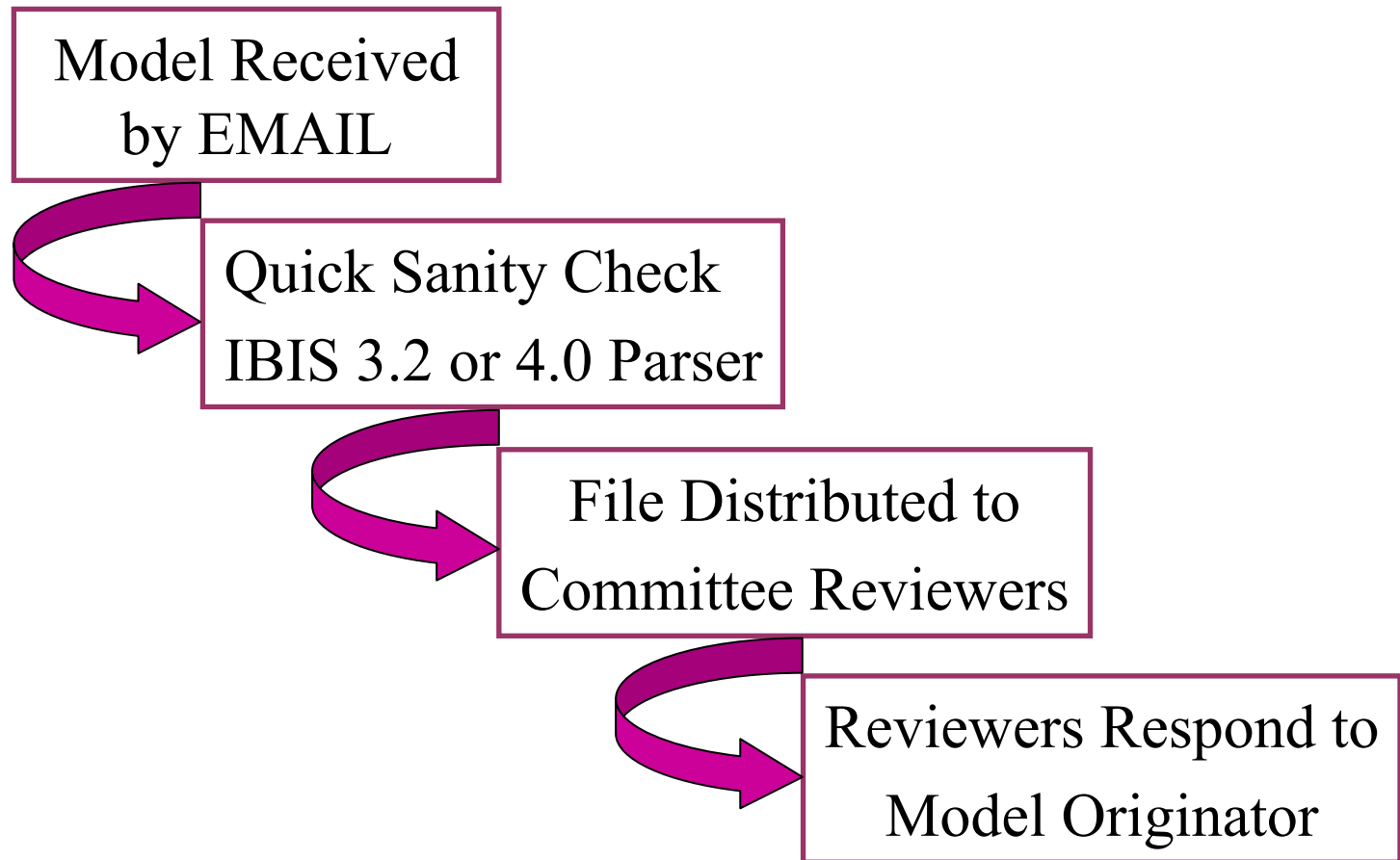
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The IBIS Model Review Committee

- Process
- Current members
- Review of a typical model
- Relationship to IBIS Quality Document

The IBIS Model Review Process

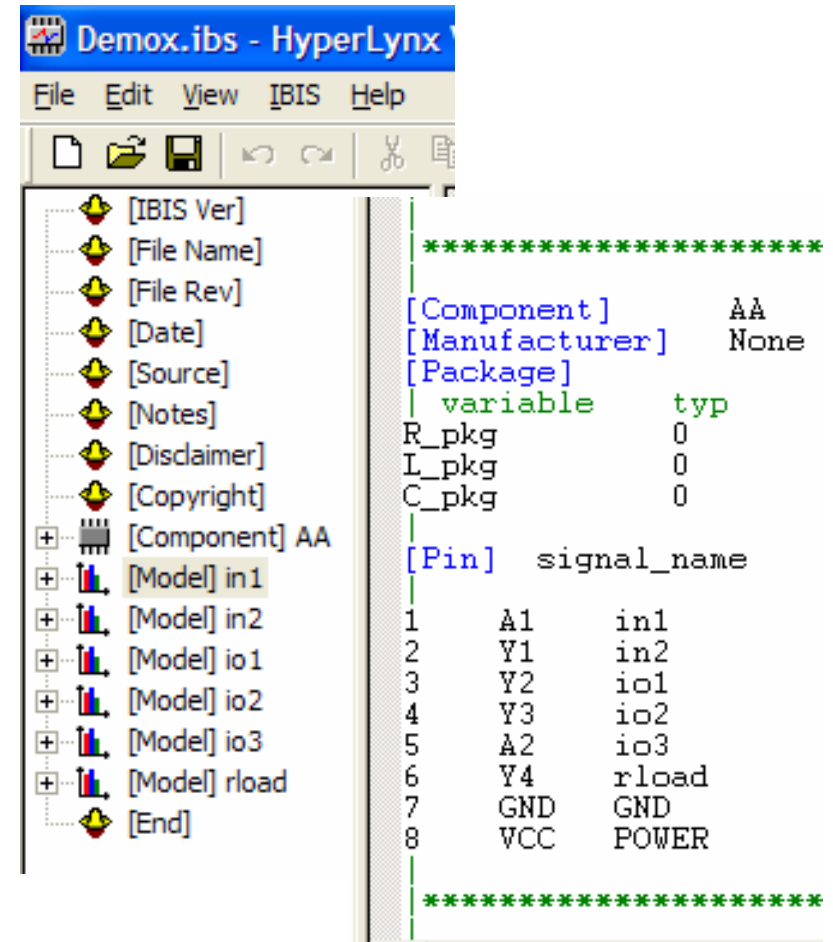


Current Committee Members

- Chair: Lynne Green, Green Streak Programs
- EDA Reviewers
 - John Angulo, HyperLynx/Mentor Graphics
 - Lance Wang, Cadence Design Systems
 - Michael Schraeder, Zuken
 - Robert Haller, SiSoft
 - Weston Beal, Mentor Graphics
- EDA companies test models with their products/tools.
- Reviewers keep models confidential.

Review of a Typical IBIS Model

- Start with IBIS parser
- Check components & pins
- Check selected models in the IBIS file
- Optional: check component and models against data sheet



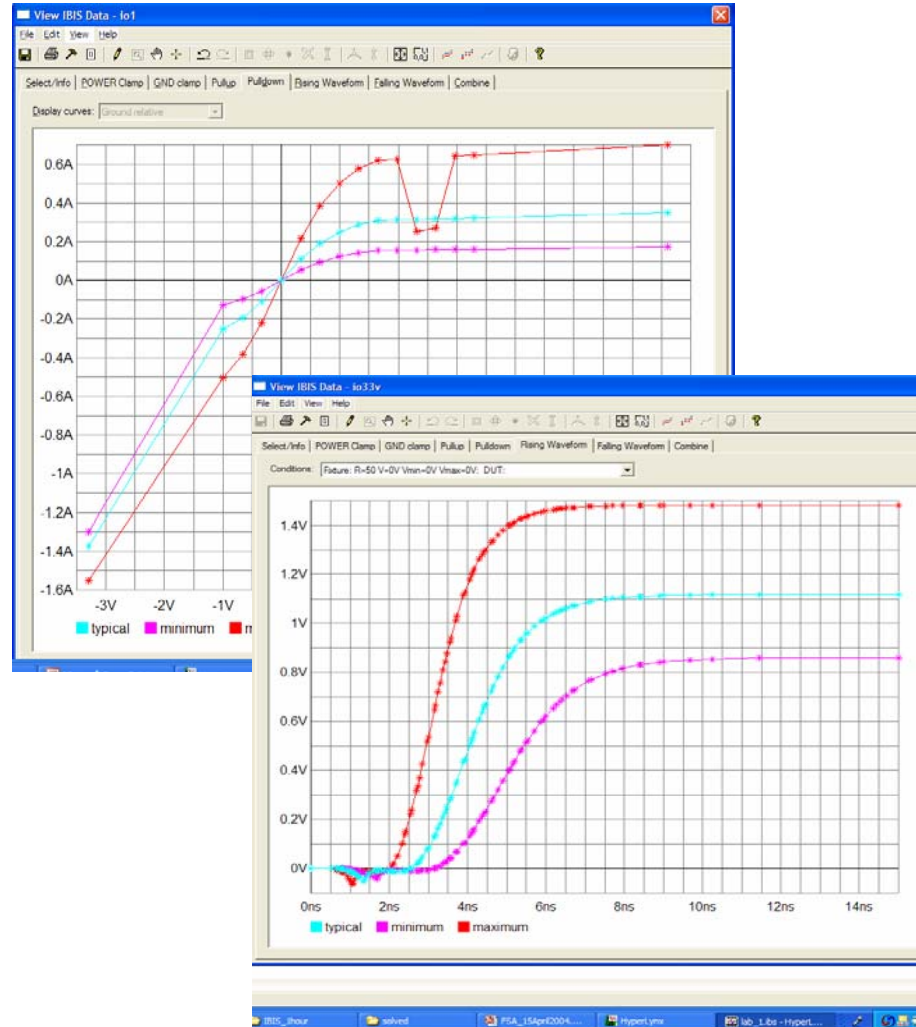
```
Demox.ibs - HyperLynx
File Edit View IBIS Help

[IBIS Ver]
[File Name]
[File Rev]
[Date]
[Source]
[Notes]
[Disclaimer]
[Copyright]
[Component] AA
[Model] in1
[Model] in2
[Model] io1
[Model] io2
[Model] io3
[Model] rload
[End]

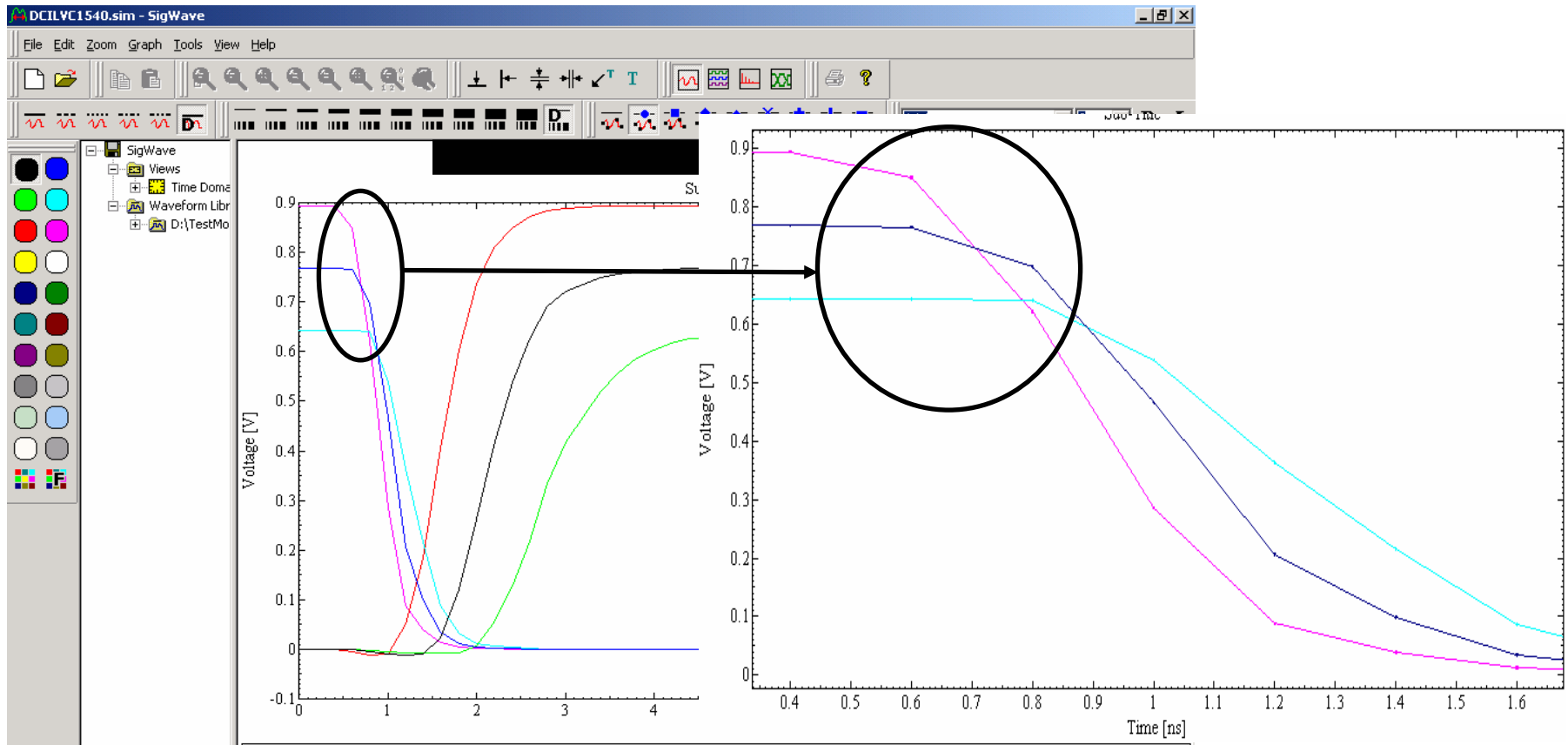
*****
[Component]      AA
[Manufacturer]   None
[Package]
  variable      typ
R_pkg           0
L_pkg           0
C_pkg           0
[Pin]  signal_name
1      A1      in1
2      Y1      in2
3      Y2      io1
4      Y3      io2
5      A2      io3
6      Y4      rload
7      GND     GND
8      VCC     POWER
*****
```

Review of a Typical Buffer Model

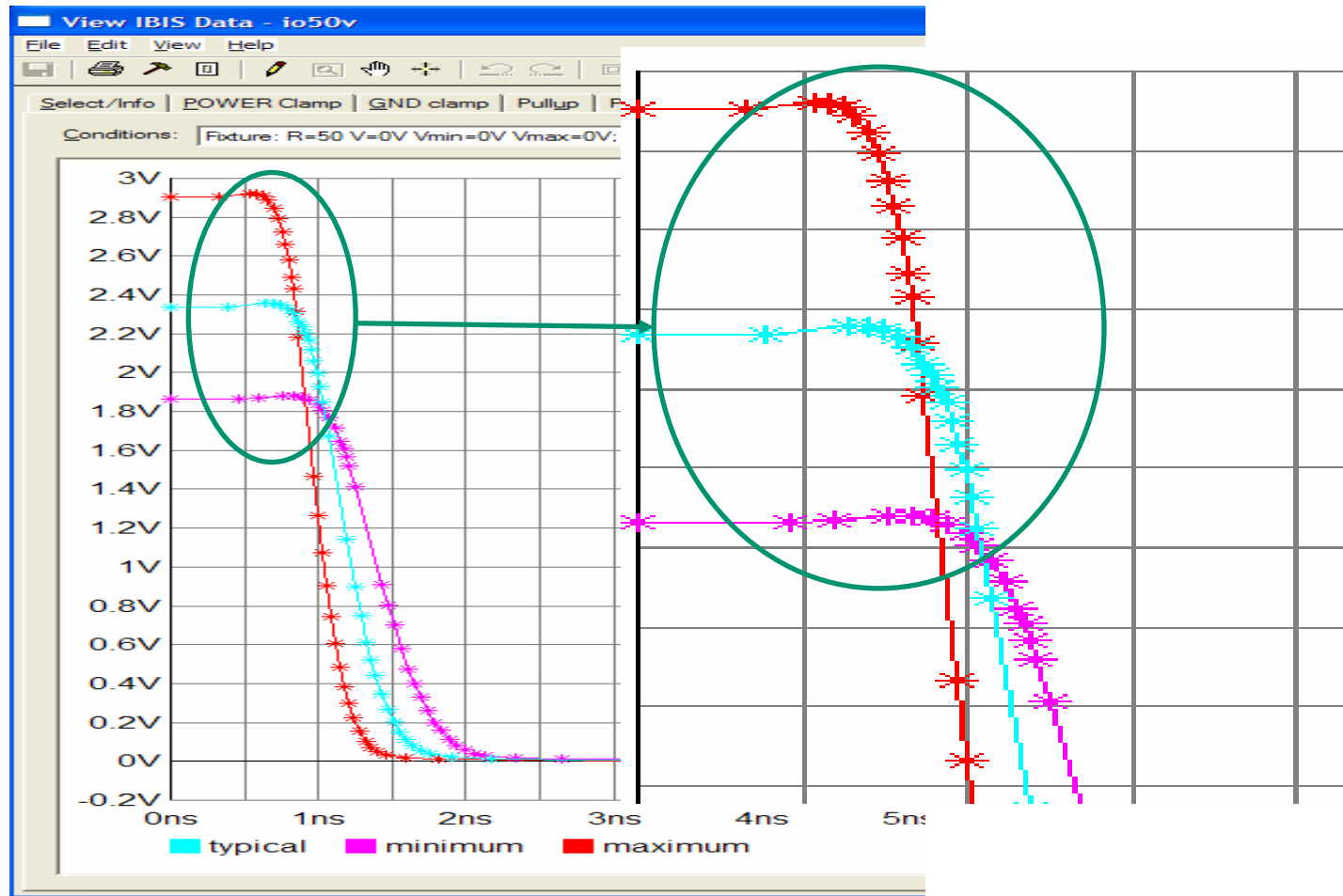
- Graphical check of data tables
 - Monotonicity
 - Separation of clamp tables
 - V-t table settles and ends
- Check data
 - Driver: V_{meas} , C_{ref} , R_{ref} , V_{ref}
 - Receiver: V_{inh} , V_{inl}
 - Temperature: $T_{yp} > 25\text{ C}$.



Review of a Typical Model: Waveforms



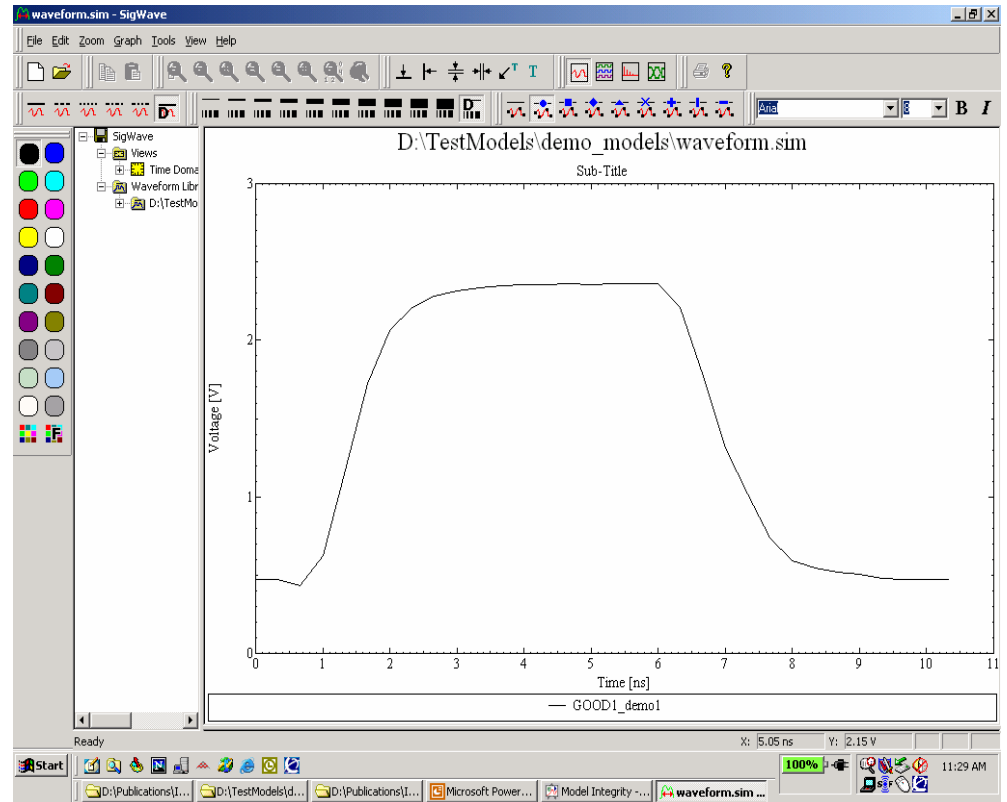
Review of a Typical Model: Waveforms



Review of a Typical Model

- Run other checks as time permits
 - Example: [Driver Schedule]
 - Items from IBIS Quality checklist
- Translate
 - Example: Cadence DML
 - Check error/warning messages
- Simulate !!!
 - Input mode
 - Output mode
 - Sanity check simulation waveforms

Green Streak Programs On-site Seminars and Workshops



Relationship to IBIS Quality Document

- Input from reviewers on the Quality Committee
- Problems seen in models
 - Reviewed models
 - Released models
- Quality checks used by reviewers
 - Feedback from reviewers to Quality Committee
 - Recommendations to model originators

Relationship to IBIS Quality Document

Quality checklist has proven helpful
for model review

Many thanks to both Committees 😊