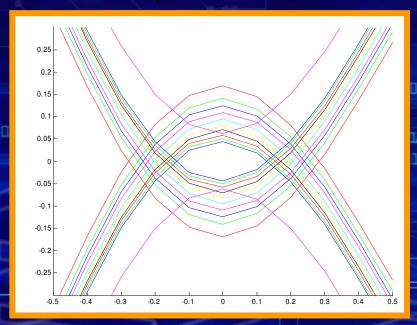
# The process and goal of the AMI BIRD

IBIS ATM Teleconference, March 30, 2010



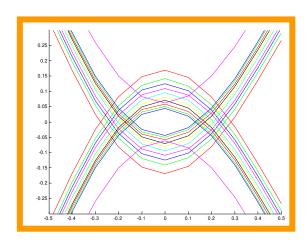
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## The process and goal of the AMI BIRD

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- 3. Process
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- 5. Conclusion

## Purpose of this presentation

- Bob Ross, the chairman of the IBIS Open Forum made a statement in the March 23, 2010 IBIS-ATM teleconference that the task group does not have a goal and a process for the AMI BIRD document that is being written and discussed
  - in a subsequent private discussion Bob made numerous comments and suggestions to Arpad Muranyi, the chairman of the IBIS-ATM task group on how to improve and speed up the process
- Let this presentation serve as an official statement of the goal(s) and process





#### Goal

- Various issues have been raised about the new AMI portions of the IBIS v5.0 specification by the parser developer, EDA tool vendors, and model makers
- The goal of the IBIS-ATM task group is to prepare and submit (one or more) BIRD-s to the IBIS Open Forum in which the problems are stated and solutions are proposed
- The purpose of this (or these) BIRD-s is ONLY to correct errors, inconsistencies and clarify ambiguities in the AMI portions of the existing IBIS v5.0 specification





#### **Process**

- Issues are identified in the ATM task group meetings
  - this has been done in Walter's draft BIRD
- A draft BIRD is written by members of the ATM task group
  - Walter has drafted a BIRD and numerous iterations have been posted on the IBIS-ATM web site in the "Work Archive" section
  - <u>http://www.vhdl.org/pub/ibis/macromodel\_wip/archive-date.html</u>
- The draft BIRD is discussed in the ATM task group meetings
  - this is what we have been doing in the IBIS-ATM task group meetings and the [ibis-macro] email reflector since August 2009
- Once the BIRD has been finalized, it will be submitted to the IBIS Open Forum for review
- The IBIS Open Forum will call for an official vote to accept the BIRD for the IBIS v5.1 specification





## Why are we not done yet?

- The BIRD attempts to address multiple issues, each of which needs careful consideration and discussion
- Comments from each ATM participant must be considered
  - need feedback from all EDA vendors to prevent serving the interest of certain vendors while putting others in a disadvantage
  - need feedback from model makers to be able to support them with features they need for their models
  - we also have to solicit comments from the parser developer to make sure there are no conflicts in the syntax, etc... and a robust parser can be developed
- Certain differences of opinions still exist and are unresolved
  - some of these do not appear that they will ever be resolved
- A certain amount of "mission creep" is slipping into the draft BIRD with desirable but not absolutely necessary changes





## What is our problem?

- Our problem is not that we do not have a goal or a process
- We chose to write a single BIRD for all issues
  - consequently decided to replace the entire AMI section of the spec
  - consequently decided(?) to separate AMI from IBIS
  - consequently decided(?) to abandon the ASCII text style
- This is equivalent to writing a brand new specification
  - not a bad idea, but was this our initial goal?
  - how long would it take to develop a new spec from scratch?
  - can this be done while maintaining backward compatibility?
- Similar "mission creep" is happening in other areas
  - reserved and model specific branches
  - jitter parameters, etc...
- These are all valid and good ideas, but not absolutely necessary to fix the current specification





#### **Conclusion**

- **As the chairman of the ATM committee, I propose the following actions:**
- Adopt a minimalistic approach
  - make a checklist with the absolutely necessary changes
  - use the list as a governing document "process" in the meetings
  - check off the various items as we make progress
- Consider writing multiple smaller BIRD-s
  - each BIRD should address one topic and an easily identifiable area of the specification
  - this will help maintaining backward compatibility
- Clarify semantics instead of add/remove/change keywords
  - the intent of the specification is not always spelled out clearly
  - come to an agreement on the intent and write clarification BIRD-s
- Consider writing a complete functioning modeling example (toolkit)
  - include Tx and Rx analog and algorithmic models with a known channel
  - EDA vendors and model makers could use it for testing





