IBIS-ATM task group report

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Achievements since DesignCon 2015

• IBIS v6.1 has been released on September 11, 2015 including the following 13 BIRDs:

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• BIRD155.2
                New AMI API to Resolve Dependent Model Parameter
                Table Corrections for Tx Jitter Parameters and Ignore_Bits
  BIRD167.1
• BIRD168.1
                Handling of Overclocking Caused by Delay in Waveform Tables
                DLL Dependency Checking
• BIRD169.1
  BIRD170
                Delete Extra Paragraph for Ports under [External Circuit]
• BIRD171.3
                Clarify that Empty Root Name is Not Permitted in AMI Files
• BIRD172.2
                Extend Multilingual Parameter and Converter Parameter Rules
                Package RLC Matrix Diagonals
  BIRD173.3
• BIRD174.1
                Quote Character Clarifications
• BIRD175.3
                Extending IBIS-AMI for PAM4 Analysis
                Power Pin Package Modeling
  BIRD176
• BIRD177
                [Initial Delay] keyword for Submodels and Driver Schedules
                Specifying Buffer Directionality for AMI
• BIRD178.3
```

- One BIRD was approved since the release of IBIS v6.1:
 - BIRD 179 New IBIS-AMI Reserved Parameter Special_Param_Names

Pending BIRDs

• **125.1** Make IBIS-ISS Available for IBIS Package Modeling Allow AMI_parameters_out to pass AMI_parameters_in data on calls to AMI_GetWave • 128.2 • 145.3 Cascading IBIS I/O buffers with [External Circuit]s using the [Model Call] keyword 147 **Back-channel support AMI Touchstonefile (R) Analog Buffer Models** 158.3 161.1 **Supporting Incomplete and Buffer-only [Component] Descriptions** • 163 **Instantiating and Connecting [External Circuit] Package Models with [Circuit Call]** 164 Allowing Package Models to be defined in [External Circuit] 165 **Parameter Passing Improvements for [External Circuit]s Resolving problems with Redriver Init Flow** 166 • **TBD New Back-channel/Co-optimization** • TBD **New interconnect BIRD** TBD C comp modeling with IBIS-ISS

Most of these BIRDs are "tabled" because of their dependence on other BIRDs or proposals

BIRDs and proposals grouped by topics

- The IBIS Interconnect Task Group is working on a proposal which will most likely supersede the following four BIRDs:
 - BIRD 125.1 Make IBIS-ISS Available for Package Modeling
 - BIRD 145.3 Cascading IBIS I/O buffers with [External Circuit]s
 - BIRD 163 Instantiating and Connecting [External Circuit] Package Models with [Circuit Call]
 - BIRD 164 Allowing Package Models to be defined in [External Circuit]
- There are two AMI related BIRDs which need to be finished:
 - BIRD 158.3 AMI Touchstonefile (R) Analog Buffer Models
 - BIRD 166 Resolving problems with Redriver Init Flow
- The Backchannel communication and channel optimization BIRDs are still awaiting a resolution:
 - BIRD 128 Allow AMI_parameters_out to pass input data to AMI_GetWave
 - BIRD 147 Back-channel support
- Miscellaneous BIRDs:
 - BIRD 161.1 Supporting Incomplete and Buffer-only [Component] Descriptions
 - BIRD 165 Parameter Passing Improvements for [External Circuit]s
- The "C_comp modeling with IBIS-ISS" proposal is on hold due to a strong overlap with the package and on-die interconnect proposal
- Started a major effort to clean up the "GND language" in the specification