IBIS ATM Task Group Report

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Progress report since the DesignCon 2025 IBIS Summit
(January 2025)

- **One BIRD has been <u>approved</u> since January 2025**
  - **220.2   Pre-driver PSIJ Sensitivity Keyword**

- **No BIRDs have been <u>rejected</u> since January 2025**

Pending BIRDs, BIRD drafts, potential discussion topics

We have no pending BIRDs at the moment, but

- We are discussing issues found in BIRD223.1 *Add support for SPIM in IBIS*, (which has been approved on November 17, 2023). A new BIRD draft is in the works which may be submitted to the IBIS Open Forum for consideration soon.
- Some ambiguities were also discovered in the BCI protocol portion of the IBIS specification and a BIRD my be submitted on this topic too

- Consider adding support for C-phy modeling

- Encryption (IEEE 1735)
- Multi-level analog buffer modeling (PAMn, C-phy, etc.)
- Modify C_comp model for T-coil modeling
- AMI_GetWave block size with continually adapting models

Adding support for C-phy in IBIS

- **C-phy is substantially different from all SerDes protocols**
  - **Three single-ended and PAM3 Tx buffers**
  - **Three differential Rx buffers**
  - **"Triggered eye"**
    - **first zero crossing among the three Rx receivers is the clock tick**
  - **Eye diagram is aligned on the right UI boundary (not in the center)**
- **Needs major changes in IBIS, regardless of how we model it**
  - **I-V / V-t curve-based models**
  - **AMI models**
- **Discussions started during the months of May-July 2024 but were suspended due to waiting for more information**
- **Interest for supporting C-phy in IBIS seems to be growing**

Invitation for collaboration

- **Please join us if you have experience in, or would like to contribute to any of these topics**

- **We meet on Tuesdays at noon US Pacific Time**

- **Agenda and Teams information are distributed a couple of hours before each meeting on the email reflector of the IBIS-ATM Task Group**

- **https://www.ibis.org/atm_wip/**
- **ibis-macro@freelists.org**

Questions / comments?

[Thank You]