JEITA IBIS Promotion Working Group Report

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- Agenda -

1. JEITA/EC Center Committee Organization
2. IBIS Promotion Working Group
   - Objective
   - Activity Status
   - Action Plan
1. JEITA/EC Center Committee Organization

General meeting
Management Board
Steering Committee

Advisory Group
Standardization Committee
Supply Chain Management Committee
Engineering Chain Management Committee
Information Technology Committee

Technical Committee for Standardization
Standardization Committee of Business Relations
IBIS Promotion Working Group

Reference
>> Organization of JEITA: http://www.jeita.or.jp/english/about/secret/index.htm
>> EC Center home page: http://ec.jeita.or.jp/eng/

JEITA; Japan Electronics and Information Technology Industries Association
IBIS; I/O Buffer Information Specification
EC Center; Electronic Commerce Center

As of Oct. 2015
2. IBIS Promotion Working Group

- Objective
- Activity Status
- Action Plan
Objective: Let’s Use IBIS Simulation

IBIS 3.2  IBIS 5.1  IBIS 6.0  V-T Curve  I-V Table

IBIS Modeling
- How to develop IBIS 5.1
- AMI models

Give me IBIS 5.1!
Do you need Power model?
AMI Model?
Do you use Linux?
IBIS 3.2 is not enough??
I don’t know.....

IBIS simulation
- Use SPICE?
- V-T?, AMI?
- I have EBD model for memory

Semiconductor Company
System Company
Activities status: outline

• Define IBIS simulation step guideline
  – Simulation Guideline for target topologies

• IBIS promotion of utilization
  – Provide any IBIS related information
    • IBIS Keyword Summary
    • Advanced IBIS technology guidance
  – IBIS Seminar

• Asian IBIS Summit, Japan
  – Support IBIS Open Forum for all logistics

• Maintain IBIS Quality WG results
  – IBIS Quality Framework Home Page
  – JEITA Book: “SI Simulation Model handbook”
Activity 1: Define IBIS simulation step guideline

• Define recommended IBIS simulation flow
e.g.
  – IBIS Check
  – Sim setting
  – Test sim

• FAQ
Activity 2: IBIS Keyword Summary

- Major 38 keyword summary
  - Frequently used keywords and parameters
- Keyword guideline for simulation purposes
Activity 3: Advanced IBIS technology guidance

- Featured items
  - IBIS-AMI
  - IBIS Models for PDN
  - BIRDS since IBIS v6.0
Activity 4: IBIS Seminar

• 1st IBIS free seminar on Nov. 16 2015
  (In the morning of IBIS Summit day)
  – 2-hour lecture using output of activities 1～3
  – Attendees: 93 persons

Voice of Attendees
• The seminar was very valuable to learn about IBIS basic.
• I would like you to explain the difference of IBIS versions.

Target of the seminar
• Using IBIS model, but not familiar
• To use IBIS model soon
• Asian IBIS Summit, Tokyo, Nov. 16, 2015  
  – Attendees: 108 persons (64 companies)

Attributes of attendees

- 55% IBIS user
- 33% IBIS provider
- 7% EDA vendor
- 5% Others
- 3% Others

Voice of Attendees

- IBIS Summit brought a lot of useful information about IBIS latest developments, IBIS-AMI and use cases.
- Expecting more information how to make and verify IBIS V5.0 or later. e.g. IBIS-AMI, Pre-driver, On-chip capacitor in PDN
Action Plan

• Enhance IBIS promotion materials
  – Define IBIS simulation step guideline
    • Add target topologies, e.g. DDR4 and High-speed SerDes
  – IBIS keyword summary
    • Increase descriptions of keywords for simulation purposes
  – Advanced IBIS technology guidance
    • Add description about Over clocking

• 2nd IBIS free seminar
  – We are planning 4-hour seminar, because there were many requests to lecture in more detail.