



JEITA IBIS Promotion Working Group Report

Asian IBIS Summit
Tokyo, Japan
November 16, 2015

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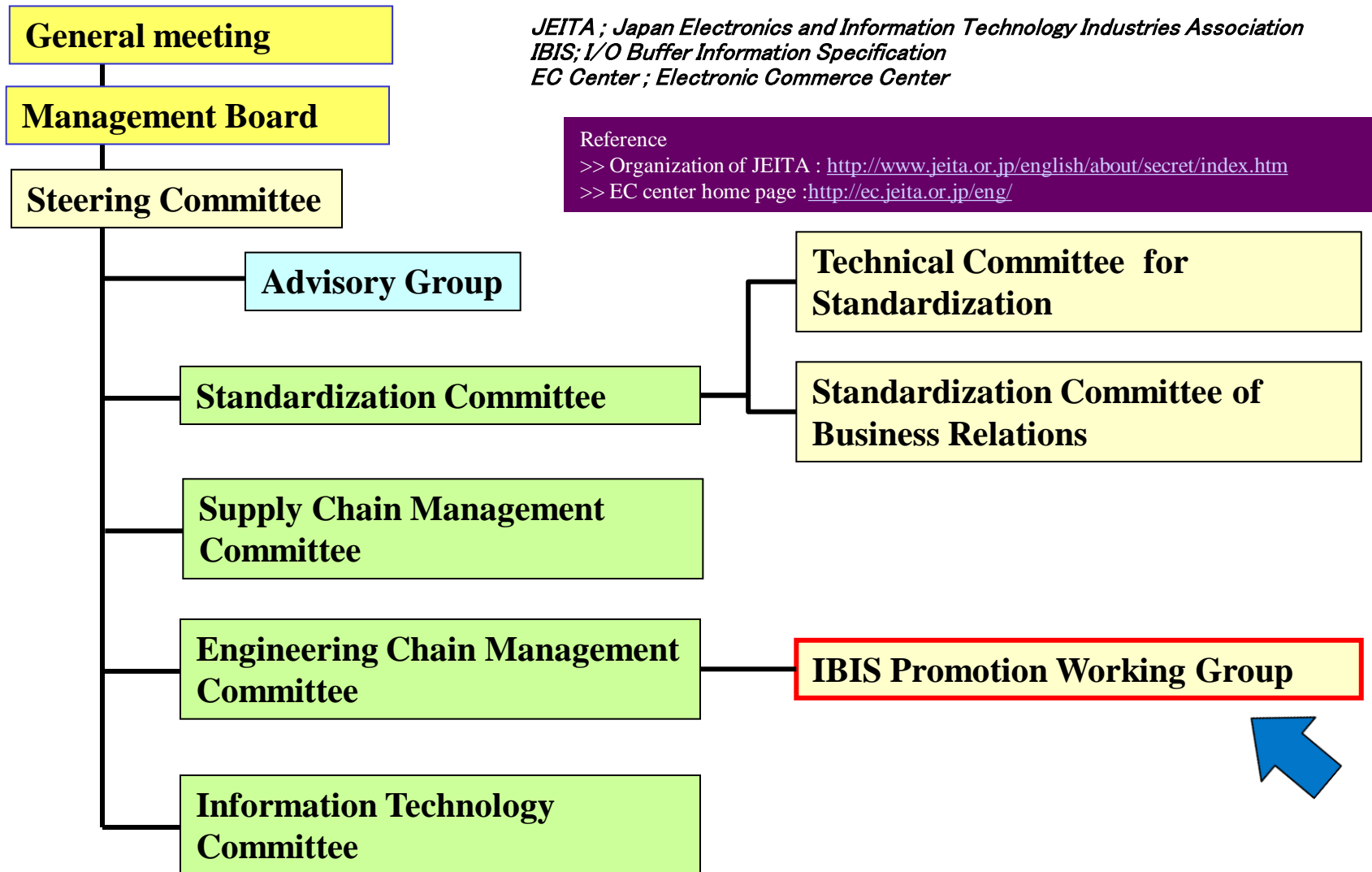
IBIS Promotion Working Group, EC Center / JEITA



— Agenda —

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

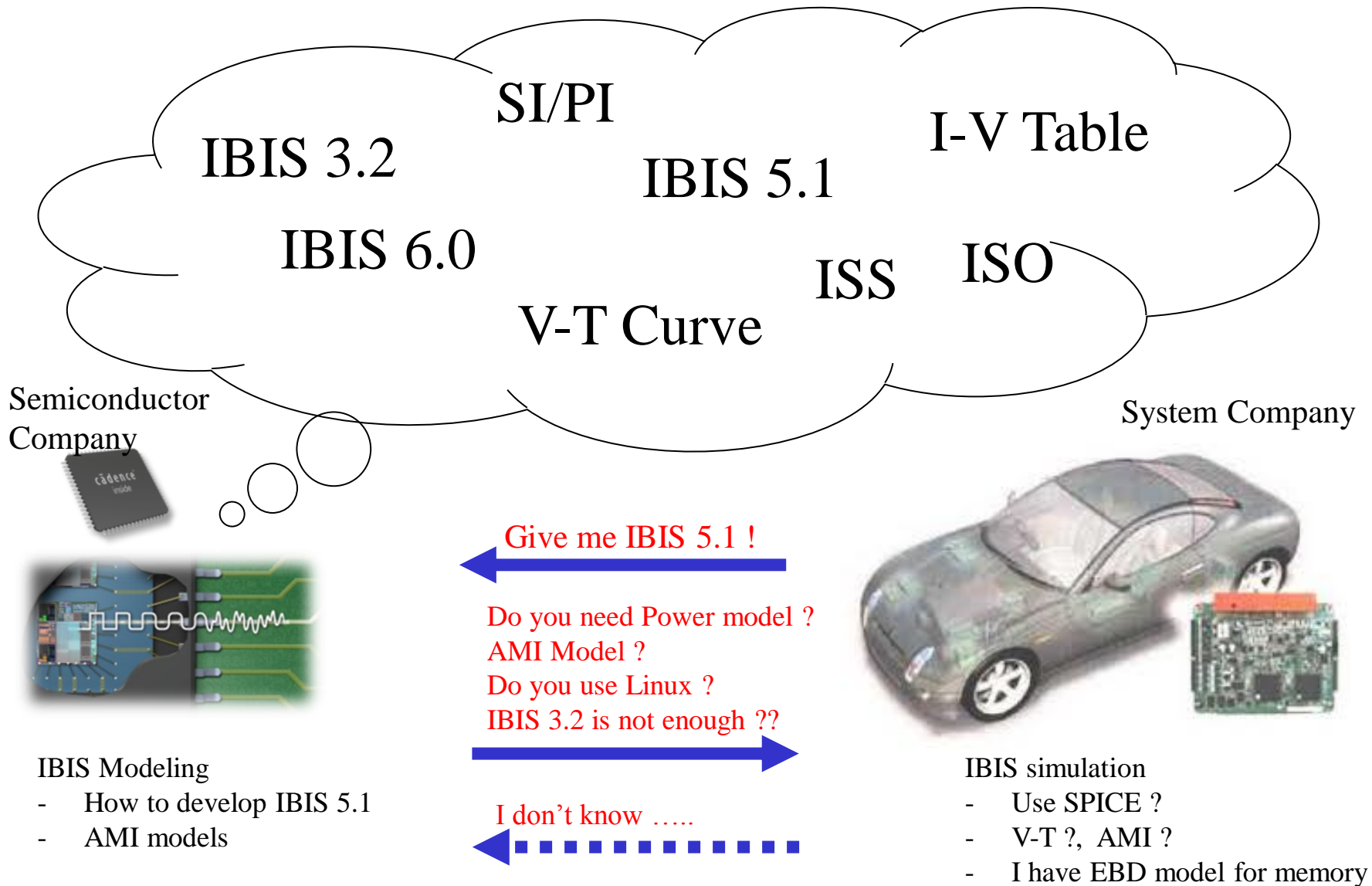
1. JEITA/EC Center Committee Organization



2. IBIS Promotion Working Group

- Objective**
- Activity Status**
- Action Plan**

Objective: Let's Use IBIS Simulation



Activities status: outline

- Asian IBIS Summit, Japan
 - Support IBIS Open Forum for all logistics
- **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**
- Maintain IBIS Quality WG results
 - IBIS Quality Framework Home Page
 - JEITA Book: “SI Simulation Model”

Today's report

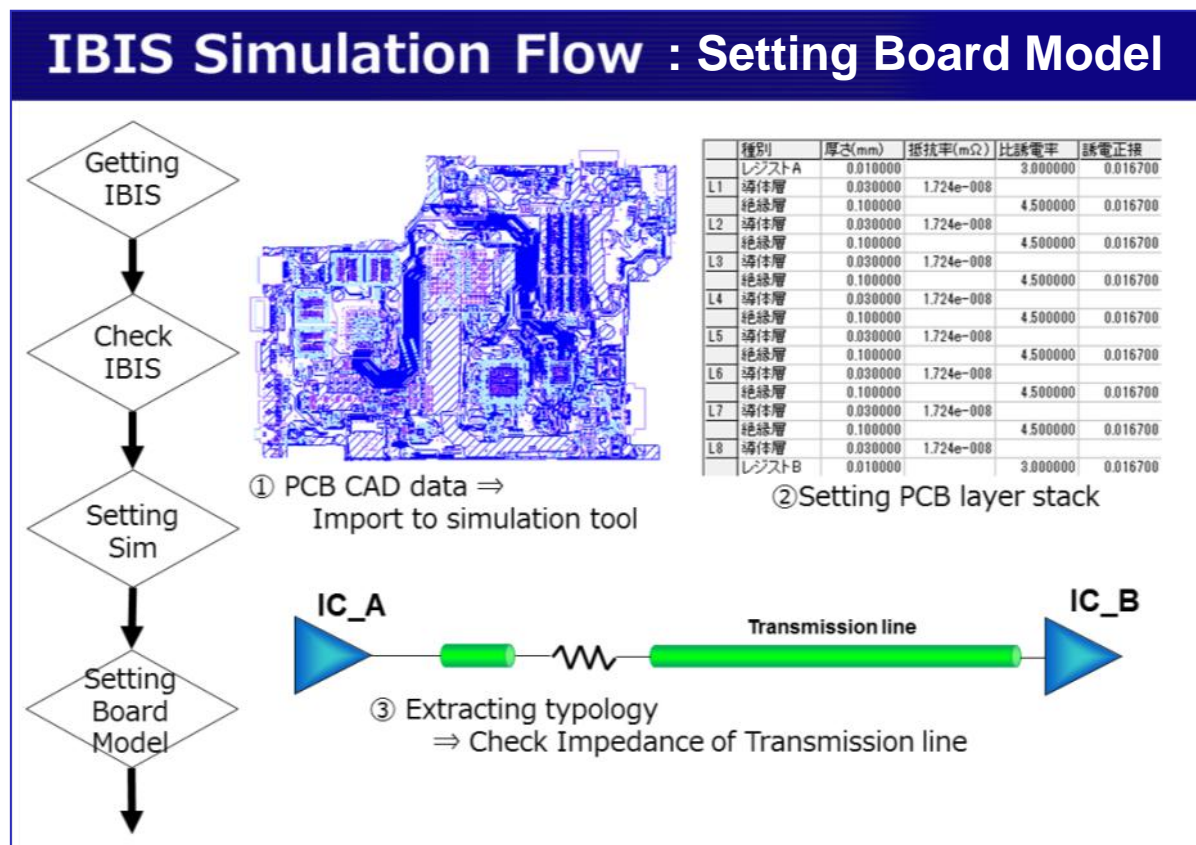
Activity 1: Define IBIS simulation step guideline

- Define recommended IBIS simulation flow

e.g.

- IBIS Check
- Sim setting
- Test sim

- FAQ



Activity 2: IBIS Keyword Summary

- Major 38 keyword summary
- Keyword guideline for simulation purposes

2.3.2 Model Spec

- **D_overshoot_area_h** Dynamic overshoot high area (in V-s)
- **D_overshoot_area_l** Dynamic overshoot low area (in V-s)
- **D_overshoot_ampl_h** Dynamic overshoot high max amplitude
- **D_overshoot_ampl_l** Dynamic overshoot low max amplitude

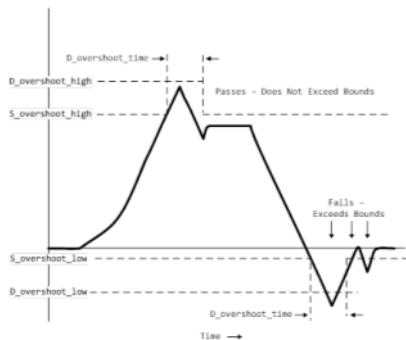


図-2.6 V3.2の仕様

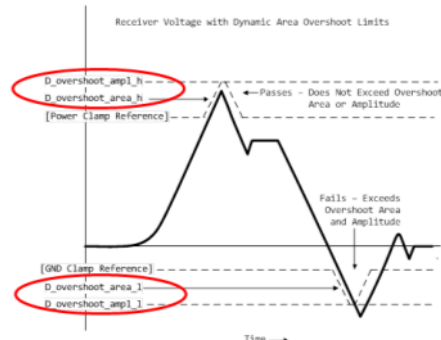
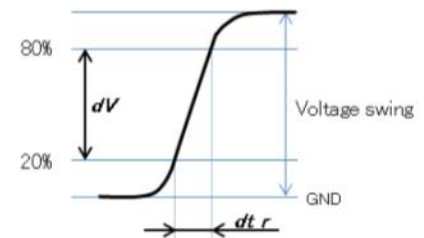
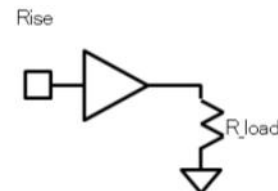


図-2.7 V5.1で追加された「ampl」「area」

2.3.6 Ramp

- Ramp dV/dt

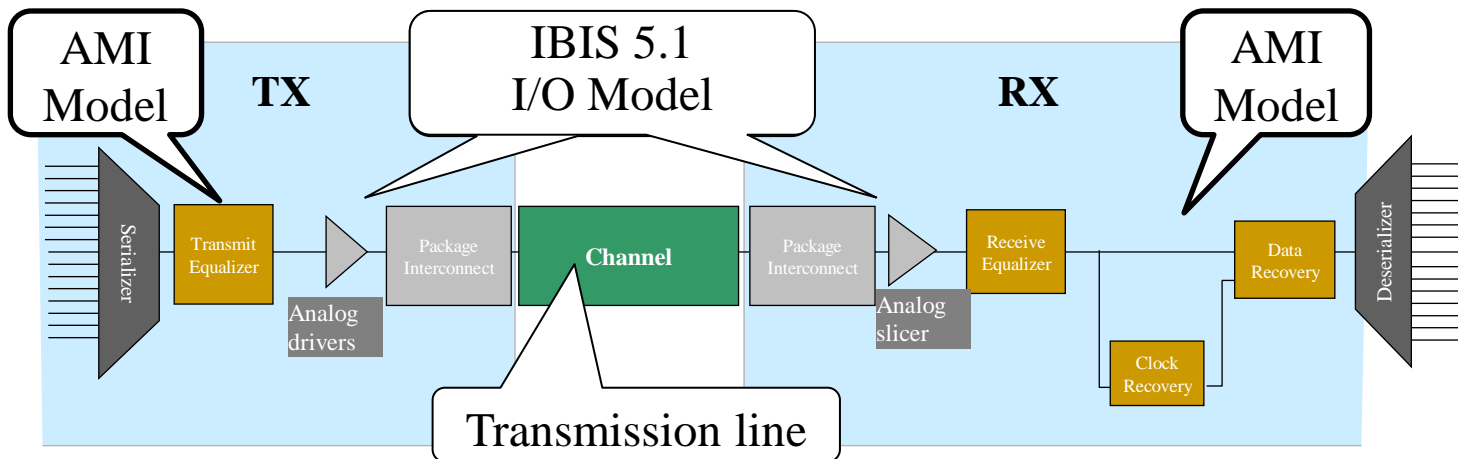
$$\frac{dV}{dt} = \frac{20\% \text{ to } 80\% \text{ Voltage swing}}{\text{time it takes to swing the above voltage}}$$



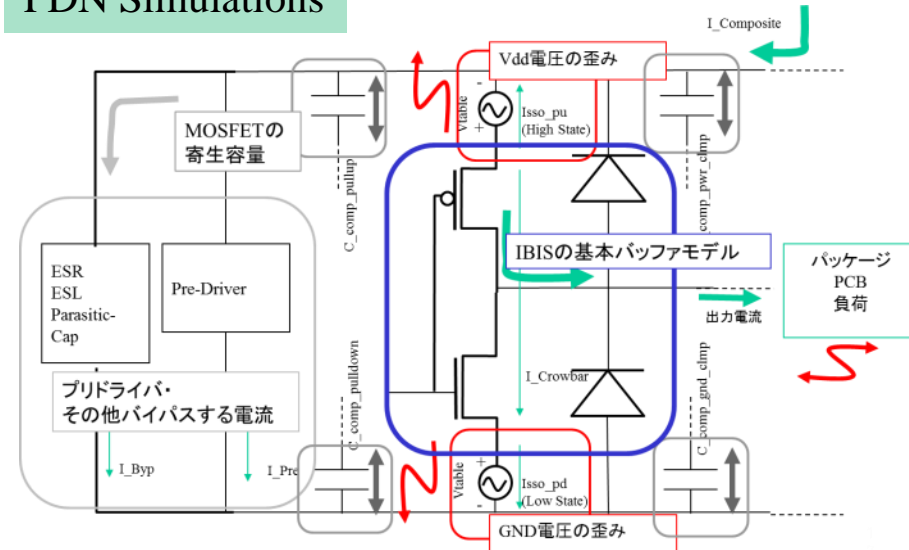
Activity 3: Advanced IBIS technology guidance

- Featured items
 - IBIS-AMI
 - IBIS Models for PDN
 - BIRDs since IBIS v6.0

IBIS-AMI

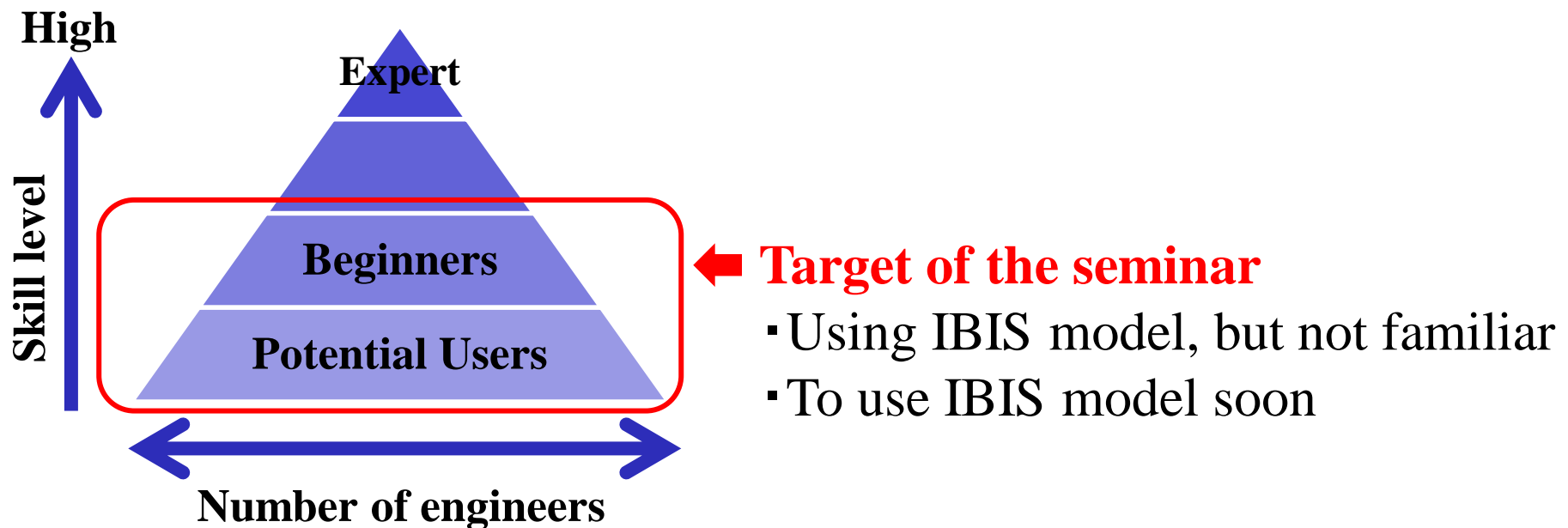


PDN Simulations



Activity 4: IBIS Seminar

- 1st IBIS free seminar on November 16 2015
 - A lecture using output of activities 1 ~ 3
 - Over 100 people have registered



Action Plan

■ Enhance IBIS promotion materials

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