Progress and Issues in IBIS-X

Stephen Peters, Intel Corp.

Current Status

- Decision made to simplify path into IBIS
 - Changes to IBIS template have been set aside for now
 - Shortly after IBIS Ver. 4.0 is approved, expect to see a BIRD adding the [Define "class name"] keyword & concept
 - Committee focusing exclusively now on macro language reference manual (IBIS-ML)
- List of primitive elements agreed upon, including transmission line element
- Enough of the ML spec has been written to start review of text
- Based on current progress, expect spec end of Jan '02

Where are we now

- Technical Milestone tracking list

 - syntax rules -- some work, documentation in flux
 - primitive elements -- agreed on set, but need the operations
 - netlist syntax -- done
 - built in behavioral elements -- not yet discussed/documented
 - programming constructs
 - declarations
 - data types
 - matrix format
 - ISSUES:

- -- discussed and documented
- -- documented, but need more
- -- documented, pretty solid
- -- discussed, not completely documented
- column selection (how to be done), needs to be put into LRM
- table interpolation types needs to be documented.

The [Define "class name"] keyword

• Syntax:

[Define "class_name"] "type name" (<optional port list>)

IBIS-ML Constructs

[End "class name"] "type name'

- [Define] keyword can be used in IBIS file itself or [Defines] are collected into a *library file*
- Once an object is defined, it is customized as shown:

```
[Begin "class name"] "object name"
"class name"_type "type name"
|
| optional data specific to this instance
|
[End "class name"]
```

• Object customization takes place in the IBIS file