

ParameterTreeKeyword_BIRD_draft3.txt

BIRD ID#: ???
ISSUE TITLE: Parameter Tree Keyword
REQUESTER: Arpad Muranyi, Mentor Graphics
DATE SUBMITTED: June ???
DATE ACCEPTED BY IBIS OPEN FORUM: ???

STATEMENT OF THE ISSUE:

BIRD 117 and 118 introduces the concept of including Parameter Trees in .ibs files. In order to mark the beginning and end of these Parameter Trees, a new keyword pair is needed.

STATEMENT OF THE RESOLVED SPECIFICATIONS:

Two new keywords shall be added to the IBIS specification, called [Begin Parameter Trees] and [End Parameter Trees].

=====

| Keyword: [Begin Parameter Trees] and [End Parameter Trees]
| Required: No.
| Description: Used to identify the beginning and end of parameter trees in .ibs files.
| Sub-Params: None.
| Usage Rules: These keywords are scoped at the top keyword hierarchy level, the same level as the [Component] keyword, so that any keyword in an IBIS file may have access to the parameter trees enclosed within them.

| Only one [Begin Parameter Trees] and [End Parameter Trees] keyword pair may exist in any .ibs file. The [Begin Parameter Trees] and [End Parameter Trees] keyword pair may be placed before the first [Component] or before the [End] keyword.

| Any number of parameter trees may be placed between the [Begin Parameter Trees] and [End Parameter Trees] keywords. The syntax of the parameter trees enclosed by these keywords must follow the rules of the tree syntax described in Section ??? of this specification.

| Context specific tree rules

| Parameter trees in .ibs files and external parameter files are not required to contain the Reserved_Parameters or Model_Specific branches.

| Usage may only have the values of In and Info.

| In:
| The value of the parameter in the parameter tree is passed to the parameter(s) named in the Parameters or

ParameterTreeKeyword_BIRD_draft3.txt

Converter_Parameters subparameter(s) of the [External Model] or [External Circuit] keywords when referencing a parameter name in a parameter tree.

Info:
Controls setting up the values of In parameters, for example used in dependency tables.

=====

[Begin Parameter Trees]

(TreeRootName
 (Description "Converter_Parameters illustration")
 (TstoneFile (Usage In)(List "Typ.s4p" "Min.s4p" "Max.s4p")(Type String)
 (Vinh (Usage In)(List 0.8 0.7 0.9)(Type Float)
 (Vinl (Usage In)(List 0.2 0.1 0.3)(Type Float)
 (Rl (Usage In)(Range 50 45 55)(Type Float)
 (Trf (Usage In)(Value 10.0e-12)(Type Float))
)

[End Parameter Trees]

ANALYSIS PATH/DATA THAT LED TO SPECIFICATION:

ANY OTHER BACKGROUND INFORMATION:
