

Impact on other 2.3 LRM sections of the changes in Chapter 8 (Scheduling Semantics)

Note: chapter numbers are those of the LRM2.3 DraftA.

1.0 Impact on Chapter 5

Action: Change syntax box 6-1 so that `analog_construct` is defined as

I changed the following based on feedback from Marq on 11/28/07

`analog_construct ::=`

```
    analog analog_statement
    | analog_initial analog_function_statement
```

p.s. i don't there should be a ';' after analog_statement - otherwise analog begin ... end wouldn't work.

Add new section 5.1.1

5.1.1 analog initial block

An analog initial block is a special analog (procedural) block, beginning with the keywords `analog initial`, for simulation initialization purposes.

Like a regular analog block, an analog initial block is also comprised of a procedural sequence of statements. If there are multiple analog initial blocks, they will be executed as if concatenated. However, statements in analog initial blocks are restricted for initialization purposes. So analog initial block shall not contain the following statements:

- statements with access functions or analog operators;
- contribution statements;
- event control statements.

This is similar to the restrictions on the statements in analog functions.

This is because an analog initial block will be executed before a matrix solution is available so statements in an analog initial block are restricted to initialization purposes prior to the availability of a solution of both the digital and the analog modules.

Additionally, digital values cannot be accessed from the analog initial block as they have not yet been assigned when the analog initial block is executed.

Analog initial block is executed once for each analysis, and can be executed for each sub-task of parameter sweep analysis (such as DC sweep). The initialization sequence of analog and digital blocks/statements are described in Section 8.3.1 Circuit Initialization. If a parameter or variable that is referenced from an analog initial block is changed during a sub-task of a parameter sweep analysis, then the analog initial block will be re-executed so that the new value is taken account of.

2.0 Revision to Chapter 8

The second sentence is revised as:

It is a one time execution of nodeset statements (3.4.3.2), and then the procedural statements in analog initial block, and then the procedural statements in Verilog initial block.

3.0 Impact on Annex A (Syntax)

Action: Make the corresponding BNF syntax change as the syntax change outlined for Syntax6-1 in 1.0

Status = Stu to do

