HELD 200x Meeting 05-23-04
14:00-16:00 Pacific Time

In Attendance:
    John Ries
    Jim Lewis
    Chuck Swart
    Eric Marschnner
    Ryan Hinton
    Deepak Pant,
    Ajay Varikat
    Steve Bailey
    John Willis

IEEE patent policy slides shown from web site.

Steve Bailey will join later. Jim Lewis will chair meeting.

First point of business, status of fast track item for DAC.

 PSL status given by Eric Marschner.
    Draft Language change proposal written by Eric. Draft has been
    shown to Steve Bailey and Peter Ashenden. Decision on level of
    explanation of PSL in LRM. The need to talk about the equivalent
    PSL processes, what they are sensitive to and when they are
    evaluated in simulation cycle requires some discussion. A balance
    is needed between inclusion by reference and clarity. Eric is also
    working on an API for accessing assertion capability from VHPI.
    Francoise is working on extensible model. Draft should be stable
    in 1 -2 weeks. The intent is to be ready for DAC.

    Asked if there will be any controversy with this proposal. Eric
    responded that he didn't thinks so with the current committee.
    There are still some decisions to make. From example how should
    PSL's time ticks be handled for asynchronous properties.

    Issue: if PSL is part of the standard, then must a tool implement
    PSL to be conforming? We had a discussion on what types of tools
    are conforming, i.e. event simulators, and tools that are not
    conforming, i.e. synthesis, formal tools, acceleration, and cycle
    simulation.

J Bhasker Not present. No discussion of TV proposals

Peter Ashenden Not present. No discussion of enhanced generics.

Fast track issues. Went through list.

FT1 Done, operator has been replaced by subprogram.
FT2 Done, but for completeness we should look at Verilog to see if we
     have other operators that we may want to add.
FT3 Done.
FT4 Done.

Discussion on what form the LCS should be. Should it be a low level
detail document? How do we handle conflicting/interacting
suggestions? Should we stay at a high level and let editor, Peter A.,
handle all the low level issues. Resolution on LCS should have a high
level summary and possibly a suggested lower level LRM changes.

FT5A * Not Done. Action Item: Jim L. needs to complete for DAC
FT5B Gone
FT6 Gone Action Item: Jim L. will mark as deleted

FT7 Not Done, Action Item: Steve B. needs to find owner.
FT8 Similar to FT5A needs work. Action Item: Jim L by DAC written up
FT9 Almost Done, need to review meeting minutes and add U format
    Action item for John.
       Eric brought up the issue of whether there are other impacts if we
       are talking about signed and unsigned numbers. Proposal doesn't
       have any problems because signed/unsigned just specify if the
       MSB is extended or is it just '0'. Maybe we should consider
       specifying 2's complement representation of integer in the data
       type and abstraction working group.

FT10 Not Done. Discussion on operator/verse statement form, Action
       Item: Jim L. needs to provide update for DAC
FT11 Partially written needs owner. Eric will help, no owner.
FT12 LCS is light, but summary intent is good. Issue was raised why
       have buffer and output ports with this change. Resolution is
       they are redundant but designers still want an output.

FT13 Almost complete. Issue was raised that maybe these functions
       should not be in package standard. Group thought a separate
       package should be used to allow for addition of assertion API
       functions and possibly VHPI routines. Action Item: Steve
       B. consider making this a VHPI package with these functions and
       Assertion API.
FT14 Discussion on what this is, some questions on how it works. Action
        Item: Jim will post updated version. Action Item: Ryan update
        with Steve's comments. Otherwise good to go. Needs to be
        updated with Steve's comments.
FT15 Same as FT14
FT16 Done, possible issues visibility, maybe solved by describing context
       in terms of text substitution, Can compiler handle CONTEXT a;
       verse CONTEXT a IS ....? Answer was yes.
FT17 deferred to modeling and productivity
FT18 Issue on name COND? Doesn't have implicit boolean comparison issue.
       Lots of discussion on abstraction, early conversion, and
       ambiguous expressions. Do we need a == or match operator? Jim
       feels FT18 is needed for fast track. Chuck: most controversial,
       needs to be polished up. Who is doing this?

FT19 Just process_comb from last meeting. For process_ff maybe add restriction
       of clocks must be in rising/fall function. Could be deferred.

FT20 Needs to update to reflect last San Jose's discussion.
       Action John Ries.write up for DAC, using new aggregate form.

FT21 Already voted on for 1164 and 1076.2. Standard 1076.3 has issues,but
     should be cleaned up by DASC at DAC.

FT22 will be replaced with proposals from John Ries as FT22, FT23, FT24, FT25.
     Proposals are:
     1) composite expressions being locally static.
     2) functions in IEEE package can be used in locally static expressions
     3) don't cares in case statements choices,
     4) case expression do not having to have locally a static type.
     Action Jim to post new proposals

FT23 moved to MP

Issues for future consideration:
Allow for better integration of C++ and C from VHDL. C++ inline VHDL
code to allow for VHDL to specify concurrency control. More standard
supplied packages. Open source model? If package from
1076.2/1164/1076.3 are part of the 1076 standard can we distribute
source of packages? Do we have agreement from IEEE for this?

Encryption Proposal:
 Donation from Cadence a good start.
 Two general outstanding issues
 1) Encoding data by sixel or base64.
 2) Access of encrypted data in tool.

Will set up new encryption group to address issues. Action item for Deepak
and Steve

Steve brought up short discussion on PAR
formation/Funding/organization Need to bring in user companies.

Steve asked if there are any issues using model DASC working group
procedures. Action Item: Steve will call for vote after DAC if no
issues are raised.

Meeting closed.

Action item summary:

WHO   WHAT
Jim Lewis   Complete FT5A.
Jim Lewis   Mark FT65 as delete on web site.
Steve Bailey   FT7 needs to find owner.
Jim Lewis   FT8 complete by DAC.
John Ries   FT9 add U format for completeness
Jim Lewis   FT10 needs completed proposal.
Steve Bailey   FT13 consider changing package in proposal.
Jim Lewis   post FT14 and FT15
Ryan Hinton   update FT14 and FT15 based on Steve B. comments.

No owner   FT11
No owner   FT18
John Ries   FT20

```
Jim Lewis              Post FT22-FT25.
Deepak/Steve           Set up eda org account/encryption working group.
Steve                  Call for vote on Working group procedures after DAC.
```