



ORACLE[®]



Technical Committee Status 08/12/10

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P1800 Technical Chair

SV-AC

- Working on errata resolution and priority enhancements
- The following mantis items have been resolved (fixed):

1627 17.16: clarify that expect statement not allowed in functions
2291 the description of \$assertoff blurs assertions and attempts
2330 Clarify that number_of_ticks argument to \$past must be compile-time constant
2353 'classes' missing from description
2362 16.14 mention of assertion control system tasks is unconnected
2387 Layout of 16.11 is inconsistent
2479 Annex F.5.2.1 conflicts with changes from 2434
2485 terminology related to immediate and deferred assertions
2551 trivial example error
2552 Confusing comments regarding nexttime operator
2557 Rules for passing automatic variables to sequence subroutines are not clear
2558 Restriction inside checker construct
2722 Errors in Figures 16-14, 16-15, and 16-16
2732 Clarify timing diagram in Figure 16-4. Future value change
2804 Need to clarify rule (b) in 16.15.6 to allow inferred clock when expression appears in procedural assertion
2839 Contradictory statement of increment/decrement operators usage.
2871 Clause 16 does not forbid assertion local variables within clocking event expressions
2927 Precedence between sequence/property operator and normal expression operator
2934 Precedence and associativity of case operator is not shown in the table
2955 Checker example is wrong
3020 Recursive property Restriction 4 is not consistent between Clause 16.13.17 and Annex F.7
3113 Add port_identifier to constant_primary BNF for sequences, properties and checker

SV-AC (cont)

- The following mantis items were resolved (no change required)

- 1756 The LRM does not indicate how the control tasks \$asserton/off/kill affect verification statements in initial blocks
- 1933 16.13.6 reference to triggered method can be improved
- 2228 Error in example in Clause 17.11.4
- 2232 Incorrect region name throughout clause 16
- 2252 Several symbols in Annex F are in green
- 2480 Bug note 7169 not implemented in 1668
- 2484 deferred cover should have only statement_or_null, not a full action block
- 2491 Conflicting rules in 16.17 (D7)
- 2807 Typing error: actual parameter in example not declared
- 2916 Wrong font in 16.4.2

- Enhancements (work in progress):

- 2328 Review and relax restrictions on data types in assertions
- 2093 Checker construct (Mantis 1900) should permit output arguments
- 2751 checker formal arguments may not be connected to interfaces // WHY?
- 2412 Allow clock inference in sequences (is being voted)
- 3035 More flexible definition of checker argument sampling

SV-BC August Update

- ▶ Identified SV-BC participants who will focus on each of the Top-10 issues
- ▶ Work started on 2 issues

Rank	Mantis ID	Summary	Status
1	696	Parameterized tasks, functions	Working through solution sketch.
9	3056	Master list of port issues	Many child items. First categorization: declaration vs. connection. Now sifting through declaration issues.

- ▶ E-mail vote resolved 14 mantis items (no changes required)
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Top-25 SV-BC Issues

Rank	Mantis ID	Summary
1	696	Parameterized tasks, functions
2	2310	Clarified Macro Semantics
3	3053	Virtual interface and interface-port issues
4	3055	Design construction issues
5	2991	Extension of enumerated types
6	1566	Variable number of task and function arguments
7	2114	Problems in definition of modports/abstract modports
8	210	Generate for module port definitions and instance port connections
9	3056	Master list of port issues
10	1084	Logical Expressions in Macros
11	2115	X-Optimism/X-Pessimism resolution
12	3073	Collected \$bits issues

Rank	MantisID	Summary
13	1697	Macro Loops
14	1202	define standard preprocessor
15	1251	x/z behavior in various contexts
16	2289	parameters inside comp unit and gen block are local
17	1504	Parameterized Structures (and Unions)
18	1144	Out-of-bounds array address
19	2081	always_comb statements
20	1553	nested module clarifications
21	2684	Variable part-selects
22	1861	Major enhancement of modports
23	1523	behavior of ?: on complex types
24	3074	Connectivity Enhancements
25	2124	`default_nettype var-type directive

SV-CC

- Has been meeting regularly (every 2 weeks)
- One meeting was canceled due to week of July 4th
- There are a few Mantis Items with proposals
 - Are being reviewed
 - None of them have made it out of the SV-CC yet

SV-DC

- Discussing the following in the area of discrete domain real modeling capabilities
 - technical areas (what)
 - use cases (why)
 - phases (when)
- Preparing for the creation of a roadmap document
- Presentations of ideas along these lines have been given by:
 - Achim Bauer (EXL Modeling)
 - Tapan Halder and Arturo Salz (Synopsys)
 - Gordon Vreugdenhil (Mentor)

SV-EC Update August 12 2010

[last update May 13 2010]

STATUS

- Started regular bi-weekly meetings.
- Good participation from users and vendors so far.
- Top-25 mantis items have been assigned a champion
- Started high-level review of top-25
 - 16 of 25 have gone through high-level discussion

·Mantis items listed on next page

Risks / Opens / Issues

- The new voting policy may hamper effective participation from usual attendees.
- A few complex items on the review list may consume all available time.

August and September 2010 PLANS

- Continue with high-level review.
- Start proposals and discussions.
- Next meeting August 16, 30 and September 13 2010

SV-EC top 25

top 25 Rank	Mantis ID	Number of Votes	weighted vote	Summary	Degrees of difficulty
1	2848	7	159	Is it legal to assign an interface containing class declaration to a virtual interface	med
2	3002	8	125	Aspect Oriented Programming (AOP) features	High
3	3046	8	112	Dotted names within inlined constraints	Low
4	1356	6	112	Multiple Inheritance	High
5	3001	9	102	Proper Polymorphic behavior of instantiation	low
6	2999	7	99	Class Handle reference inside of Constraints	med
7	3003	6	98	Constraint Composition	High
8	3082	7	96	(4) Ambiguity resolution (see slide 10 for examples of parts of the Standard that have been interpreted differently by different simulators)	
9	2845	4	84	virtual interface type checking versus interface type that had been defparam'ed	high
10	2956	4	76	clarify class 'process' definition (9.7 vs 18.13.3, 18.13.4, 18.13.5)	low
11	2505	4	76	class select: what is allowed after the dot?	low
12	2735	4	73	Ballot Comment #48: Chaining of method calls	med
13	1706	4	72	Meaning of static prefix for virtual interface assignments	
14	2488	4	69	Are virtual method calls legal within class constructors?	med
15	2112	6	69	Remove restrictions on NBA assignments to class members	med
16	3028	6	68	constraints for unique array elements.	Med
17	2950	4	67	virtual method prototype matching	low
18	2794	4	64	Clarify queue methods return status	low
19	2993	4	63	Cross cover points across different cover groups	med
20	1442	3	63	Clocking blocks legal in modports, missing from text description in 20.9	
21	2953	6	61	Algorithmic generation of covergroup bin contents	high
22	1349	5	61	fork/join_none: what if parent thread terminates without blocking statement?	
23	2949	4	60	LRM is silent about the semantics of referencing a clocking block output	low
24	2451	6	58	Omitting body defaults	med
25	2987	6	56	Soft Constraints	med

SV-FC

- No status received

Champions

- Have not yet met for this PAR
- Expect to hold first conference call late August or early September.