

Suggested Resolution

In Clause 16.14.1, add at the end:

Since the action block of an assert statement executes in the reactive region, the automatic variables referenced in the action block may not be valid when the action block executes. Therefore the action block of an assert statement shall not refer to an automatic variable declared outside of the action block.

Elements of dynamic arrays, queues and associative arrays may get removed from the array or array may get resized before the action block executes. Therefore the action block of an assert statement shall not refer to dynamic arrays, queues or associative arrays.

In Clause 16.14.2, add:

If the property has a disabled evaluation, neither the pass nor fail statements of the *action_block* are executed. The execution of pass and fail statements can be controlled by using assertion action control tasks. The assertion action control tasks are described in 19.11.

Since the action block of an assume statement executes in the reactive region, the automatic variables referenced in the action block may not be valid when the action block executes. Therefore the action block of an assume statement shall not refer to an automatic variable declared outside of the action block.

Elements of dynamic arrays, queues and associative arrays may get removed from the array or array may get resized before the action block executes. Therefore the action block of an assume statement shall not refer to dynamic arrays, queues or associative arrays.

In Clause 16.14.3, add:

The pass statement specified in *statement_or_null* shall be executed once for each successful evaluation attempt of the underlying *property_spec*. The pass statement shall be executed in the Reactive region of the timestep in which the corresponding evaluation attempt succeeds. The execution of *statement_or_null* can be controlled by using assertion action control tasks. The assertion action control tasks are described in 19.11.

Since the pass statement of the cover statement executes in the reactive region, the automatic variables referenced in the pass statement may not be valid when the pass statement executes. Therefore the pass statement of a cover statement shall not refer to an automatic variable declared outside of the pass statement.

Elements of dynamic arrays, queues and associative arrays may get removed from the array or array may get resized before the pass statement executes. Therefore the pass statement of a cover statement shall not refer to dynamic arrays, queues or associative arrays declared outside.

In clause 16.10, add:

Each argument of a subroutine call attached to a sequence must either be passed by value as an input or be passed by reference (either **ref** or **const ref**; see 13.5.2). Actual argument expressions that are passed by value use sampled values of the underlying variables and are consistent with the variable values used to evaluate the sequence match. The variable passed by value as an input can only be of type allowed in 16.5.1. An automatic variable shall not be passed as an argument to subroutine call either as input or ref type. The rules for passing elements of dynamic arrays, queues and associative arrays as ref arguments are described in 13.5.2.