36.16 Variables

ADD

30) The vpiDecompile and vpiFullName properties for variable objects which are members of structs, unions, or class vars shall include their struct, union, or class var name prefixes. Such prefixes shall include all nested levels of vpiParent objects sufficient to identify the respective member element in an expression. The vpiName property for these objects shall not include such prefixes. The vpi_handle_by_name function shall require the vpiDecompile form of the name to properly resolve it for any non-top-level scope context, and the vpiFullName form shall be required for the top level. If the object is an indexed element or indexed sub-array (slice) of another object, those indices shall be included in vpiDecompile, vpiName, and vpiFullName properties for the object in order to distinguish it from its vpiParent object. Examples:

module top;
  bit [7:0] arr1 [1:4][9:15];
  struct {
    integer i1;
    logic[1:4]vec[5:8];
    struct {
      shortint j1;
      byte b1;
    } inner1;
  } str1;
  class cdef;
    int cvInt;
  endclass
  cdef cv = new;
endmodule

// Objects from above declarations-
  vpiFullName : top.arr1[1][9]
  vpiDecompile : arr1[1][9]
  vpiName : arr1[1][9]

  vpiFullName : top.str1.i1
  vpiDecompile : str1.i1
  vpiName : i1

  vpiFullName : top.str1.inner1.j1
  vpiDecompile : str1.inner1.j1
  vpiName : j1

  vpiFullName : top.str1.vec[5]
  vpiDecompile : str1.vec[5]
  vpiName : vec[5]

  vpiFullName : top.cv.cvInt
  vpiDecompile : cv.cvInt
  vpiName : cvInt
36.15 Nets

ADD

29) The vpiDecompile and vpiFullName properties for net objects which are members of structs shall include their struct name prefix. Such prefixes shall include all nested levels of vpiParent objects sufficient to identify the respective member element in an expression. The vpiName property for these objects shall not include such prefixes. The vpi_handle_by_name function shall require the vpiDecompile form of the name to properly resolve it for any non-top-level scope context, and the vpiFullName form shall be required for the top level. If the object is an indexed element or indexed sub-array (slice) of another net object, those indices shall be included in vpiDecompile, vpiName, and vpiFullName properties for the object in order to distinguish it from its vpiParent object. Examples:

module top;
   wire logic[7:0] warr1 [1:4][9:15];
   wire struct {
      integer i1;
      logic[1:4]vec[5:8];
      struct {
         time t1;
         integer j1;
      } inner1;
   } str1;
endmodule

// Objects from above declarations-
   vpiFullName : top.warr1[1][9]
   vpiDecompile : warr1[1][9]
   vpiName : warr1[1][9]

   vpiFullName : top.str1.i1
   vpiDecompile : str1.i1
   vpiName : i1

   vpiFullName : top.str1.inner1.j1
   vpiDecompile : str1.inner1.j1
   vpiName : j1

   vpiFullName : top.str1.vec[5]
   vpiDecompile : str1.vec[5]
   vpiName : vec[5]