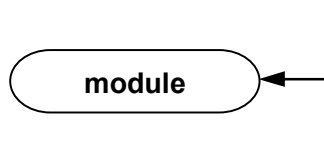


## Objectives

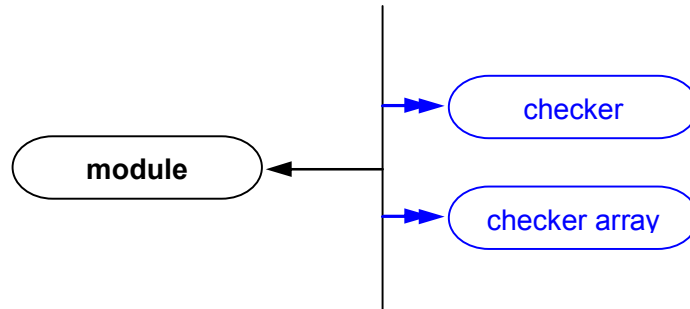
This proposal elaborates VPI diagrams for *checkers*. The basic checker proposal is covered by **Mantis 1900**.

### 36.4 Module

REPLACE



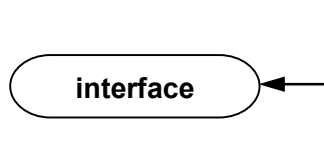
WITH



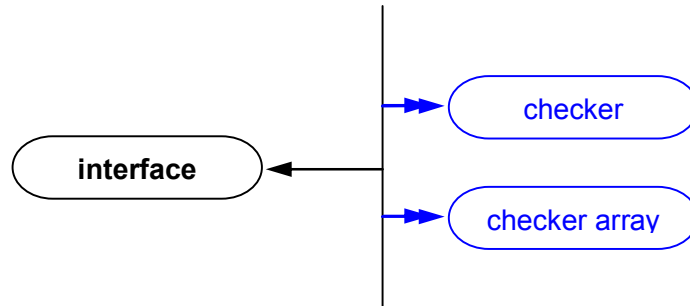
Note to the editor: Only modified part is shown.

### 36.4 Interface

REPLACE



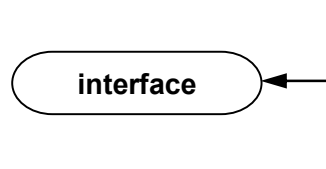
WITH



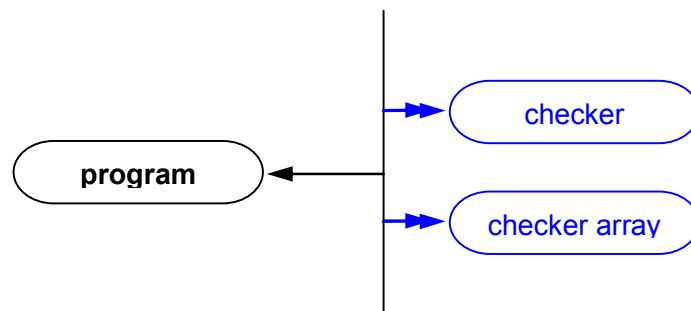
Note to the editor: Only modified part is shown.

### 36.8 Program

REPLACE



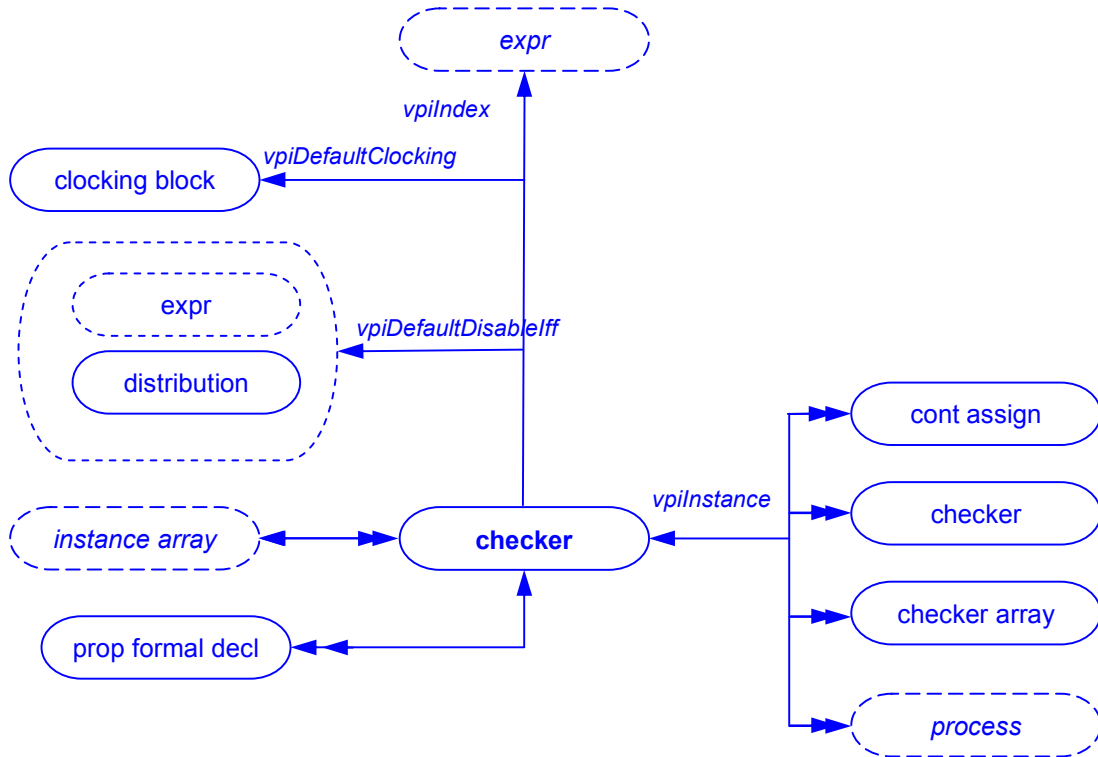
WITH



Note to the editor: Only modified part is shown.

### 36.9 Checker

Note to the editor: Please, shift the numeration of the subsequent clauses accordingly.

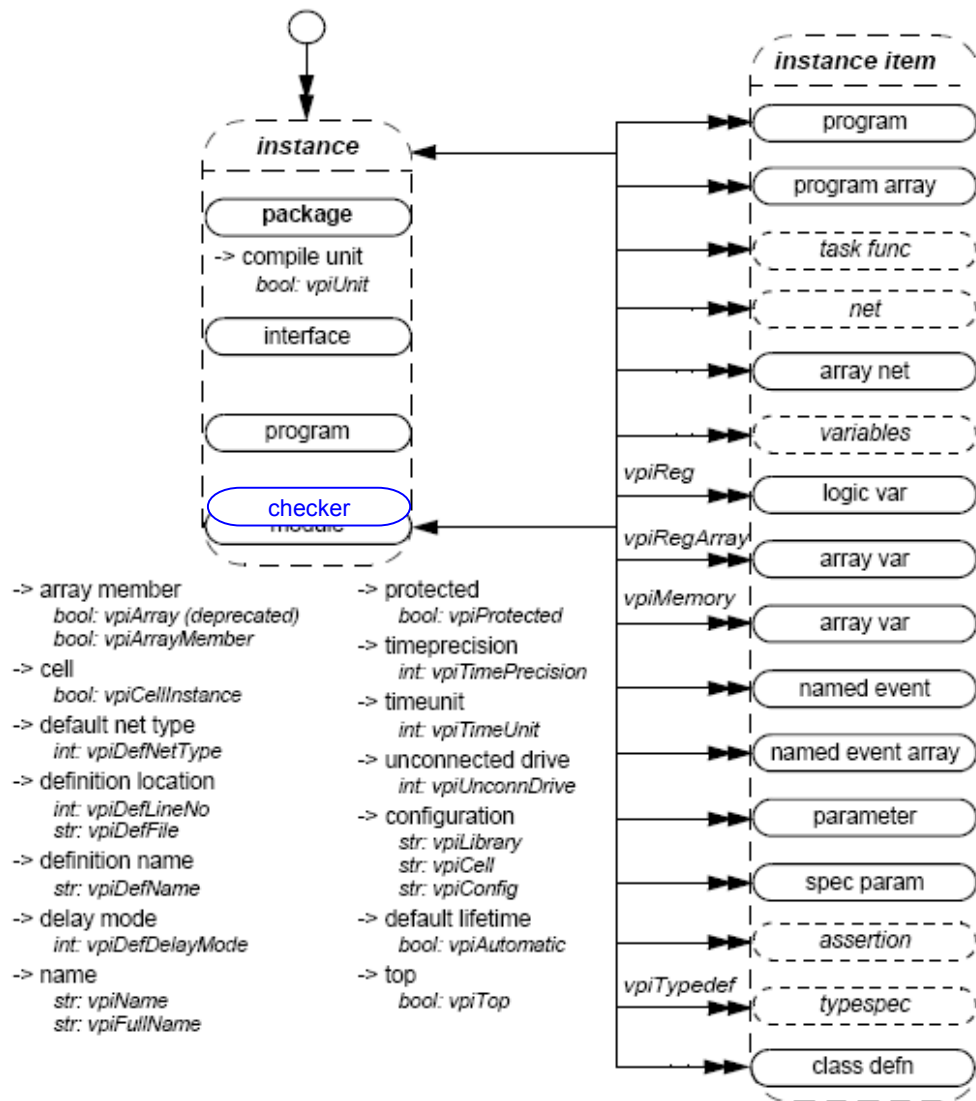


Details:

- 1) If a checker is an element within an instance array, the **vpiIndex** transition is used to access the index within the array. If a checker is not part of an instance array, this transition shall return NULL.

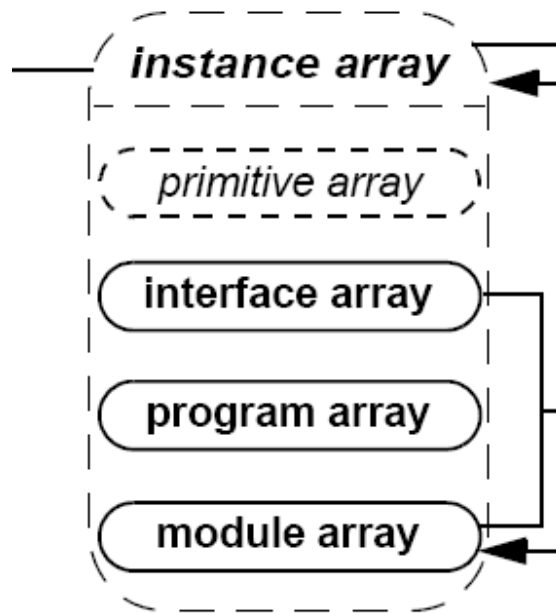
### 36.9 Instance

CHANGE TO

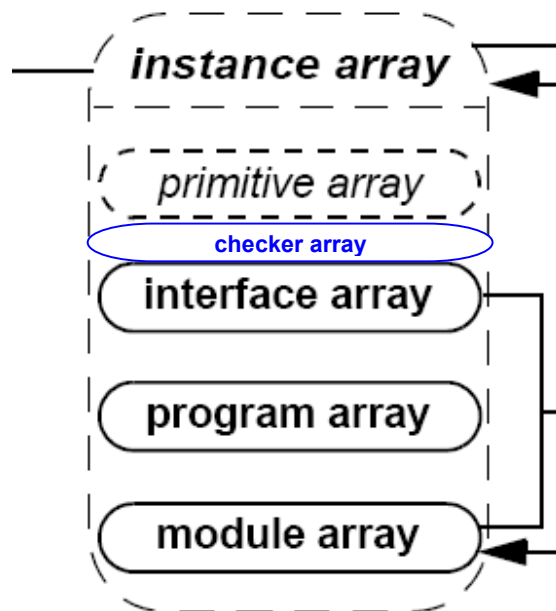


### 36.10 Instance arrays

REPLACE



WITH



### 36.16 Variables

[ADD to the property list](#)

-> CheckQualifier

*int: vpiCheckQualifier*

ADD to Details

*Insert appropriate number here*) A value of **vpiNoCheck** for the property **vpiCheckQualifier** shall indicate that the variable is a regular variable. A value of **vpiCheck** shall indicate that the variable is a regular checker variable. A value of **vpiFreeCheck** shall indicate that the variable is a free checker variable (see 16.18.6).

### 36.53 Process

REPLACE

-> always type

*bool: vpiAlwaysType*

WITH

-> always type

*bool: vpiAlwaysType*

-> initial type

*bool: vpiInitialType*

REPLACE

Details:

1) **vpiAlwaysType** can be one of **vpiAlways**, **vpiAlwaysComb**, **vpiAlwaysFF**, or **vpiAlwaysLatch**.

WITH

Details:

1) **vpiAlwaysType** can be one of **vpiAlways**, **vpiAlwaysComb**, **vpiAlwaysFF**, ~~**vpiAlwaysLatch**~~, or **vpiAlwaysCheck**.

2) **vpiInitialType** can be one of **vpiInitial**, **vpiInitialCheck**.

### M.2 Source code

REPLACE

```
#define vpiProgram 602
```

WITH

```
#define vpiProgram 602
```

```
#define vpiChecker Editor to fill
```

REPLACE

```
#define vpiProgramArray 604
```

WITH

```
#define vpiProgramArray 604
#define vpiCheckerArray Editor to fill
```

REPLACE

```
#define vpiConstantVariable 612
#define vpiStructUnionMember 615
```

WITH

```
#define vpiConstantVariable 612
#define vpiStructUnionMember 615
```

```
#define vpiCheckQualifier Editor to fill
#define vpiNoCheck 1
#define vpiCheck 2
#define vpiFreeCheck 3
```

REPLACE

```
#define vpiAlwaysType 624
#define vpiAlwaysComb 2
#define vpiAlwaysFF 3
#define vpiAlwaysLatch 4
```

WITH

```
#define vpiAlwaysType 624
#define vpiAlwaysComb 2
#define vpiAlwaysFF 3
#define vpiAlwaysLatch 4
#define vpiAlwaysCheck Editor to fill
#define vpiInitialType Editor to fill
#define vpiInitialCheck Editor to fill
```