

Assertion API errata update as of 7-Jan-2004

[all references related to SV 3.1a draft 2,
and assume an earlier application of the changes defined in LRM 121]

Section 28.4.2, "Placing assertion callbacks"

update this part of LRM-121 [related to draft2 paper page 341, prototype for vpi_register_assertion_cb()]:

Change (changes in red and blue):

Use vpi_register_assertion_cb() to place an assertion callback, the prototype is:

```
/* typedef for vpi_register_assertion_cb callback function */
typedef PLI_INT32 (vpi_assertion_callback_func) (
    PLI_INT32 reason,          /* callback reason */
    p_vpi_time cb_time,       /* callback time */
    vpiHandle assertion,      /* handle to assertion */
    p_vpi_attempt_info info,   /* attempt related information */
    PLI_BYTE8 *user_data      /* user data entered upon registration */
);

vpiHandle vpi_register_assertion_cb(
    vpiHandle assertion,      /* handle to assertion */
    PLI_INT32 reason,         /* reason for which callbacks needed */
PLI_INT32 (*cb_rtn) ( /* callback function */
    PLI_INT32 reason,        /* callback reason */
    p_vpi_time cb_time,     /* callback time */
    vpiHandle assertion,
    p_vpi_attempt_info info,
    PLI_BYTE8 *userData ),
    vpi_assertion_callback_func *cb_rtn,
    PLI_BYTE8 *user_data      /* user data to be supplied to cb */
);

typedef struct t_vpi_assertion_step_info {
    PLI_INT32 matched_expression_count;
    vpiHandle *matched_exprs;          /* array of expressions */
    p_vpi_source_info *exprs_source_info; /* array of source info */
    PLI_INT32 stateFrom, stateTo;      /* identify transition */
} s_vpi_assertion_step_info, *p_vpi_assertion_step_info;

typedef struct t_vpi_attempt_info {
    union {
        vpiHandle failExpr;
        p_vpi_assertion_step_info step;
    } detail;
    s_vpi_time attemptStartTime; /* Time attempt triggered */
} s_vpi_attempt_info, *p_vpi_attempt_info;
```