

Eligible voters		Closed 2-June-2006										
Last Name	First Name	2038	2062	2074	2082	2085	2086	2091	2092	2093	2094	2095
Ashenden	Peter	1	1	1	1	1	1	1	1	1	1	1
Aynsley	John	1	1	1	1	1	1	1	1	1	1	1
Bailey	Stephen	1	1	1	1	1	1	1	1	1	1	1
Lewis	Jim	1	1	1	1	1	1	1	1	1	1	1
Molenkamp	Bert	1	1	1	1	1	1	1 [EM1]	1	1	1	1
Myers	Robert	A	A	1	1	1	1	1	1	1	1	1
Ries	John	1	1	1	1 [JR1]	1	1	1 [JR2]	1	1	1	1
Shankar	Sukrit	1	1	1	1	1	1	1	1	1	1	1
Shields	John	1	1	1	1	0 [JS1]	1	1	1	1 [JS2]	1	1
Swart	Chuck	1	1	1	1	1	1	1	1	1	1	1
Varikat	Ajayharsh	1	1	1	1	1	1	1	1	1	1	1
Zwolinski	Mark											
Wallace	Richard											
Martinolle	Francoise											

[EM1] One might then ask why std_logic_1164 includes the to_stdlogicvector and to_stdulogicvector functions, if their effect can be achieved with a simple type conversion. I think there is another reason. In the VHDL'87 standard an implicit type conversion was not allowed in a port map, e.g.

```
u_add : add_unconstrained
```

```
...
```

```
    std_logic_vector(smpl_out) => Asmpl_out -- not VHDL'87 compliant
);
```

In this case to_stdlogicvector had to be used.

[JS1] The rationale given is not compelling to me. Unless the parameter is read, it need not be initialized. That may be considered an optimization issue. The optimization is reasonable to enable, if the out mode parameter is not written back unless written to. It has intuitive behavior with respect to other optimizations like inlining, which may be done manually by the user. I don't object to defining its initial value, where there is reason to require it. I do object to requiring unconditional write back. Perhaps there is further rationale to justify that which I am unaware of.

[JS2] Minor misstatement in the rationale and analysis, but I agree with the change.

[JR1] 2082: A4If we are going to have out variable parameter always initialized to a value, we should allow out variable parameters to have explicit default values.

[JR2] 2091 The reason for the conversion functions in std_logic_1164 is that the package was initially written for the 87 version of the spec and the changes to allow array types to be closely related is a 93 addition