

The PLI Task Force



■ Created by the main IEEE-1364 Working Group

- Some members served only on the task force
- Some members served on both the task force and the main Working Group

■ PLI Task Force Members

Andrew T. Lynch Task Force Leader Chronologic

Stuart Sutherland Technical Editor
Sutherland HDL Consulting

Charles A. Dawson
Cadence

Rajeev Madhavan
AMBIT

Joel Paston
Chronologic

Sathyam K. Pattanam
Cadence

David Roberts
Cadence

Marco Zelado
Microchip

Guoqing Zhang
Fintronics

PLI Task Force Rules



■ Held independent meetings

- Met one to two times per month for 10 months
- Conducted considerable business via e-mail

■ Followed same rules as the main Working Group

- Issues presented and discussed
- All resolutions formerly proposed and voted on
- A majority vote required to accept a proposal

■ Final document submitted to main 1364 Working Group

- The Working Group reviewed the PLI document
- The Working group voted to accept the document

PLI Task Force Objectives



■ Main Objective: Create a Verilog PLI standard that is:

- Accurate
- Specific
- Portable

■ Major challenges to overcome:

- The de facto PLI standard (Verilog-XL) did not match the OVI standard
- The de facto standard was continually changing
- OVI had two PLI standards
 - » PLI 1.0
 - » PLI 2.0

The Two OVI PLI Standards



■ PLI 1.0

- Based on what Cadence released to the public domain in 1990
- An evolved standard (not designed to a formal specification)
 - » Inconsistent syntax & semantics
 - » Contains many redundancies
 - » Cannot access some data in the Verilog HDL
- Used extensively in the Verilog market

■ PLI 2.0

- Introduced by OVI in 1993
- Designed to a formal specification
- Intended to replace PLI 1.0
- No users and no complete product implementations

■ **The PLI 1.0 and 2.0 standards are not compatible**

The Proposed IEEE 1364 PLI Standard

- **A single PLI standard**
- **Incorporates all of the former OVI PLI 1.0**
 - Now called **TF** and **ACC** routines
- **Incorporates all of the former OVI PLI 2.0**
 - Now called **VPI** routines
- **Incorporates Verilog-XL 1.6x de facto standard PLI routines**
- **Provides full backward compatibility with existing PLI applications**
- **Provides future direction and ease of use with the VPI routines**