

Status Report

P1500 Documentation Task Force

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Task Force Organization

- **Mission**
Produce first full draft document of P1500 standard for non-merged digital logic and memory cores
- **Target**
Document progress of technical Task Forces with at most one WG meeting delay
- **Members**
 - Erik Jan Marinissen* (Philips Research) – Tony Taylor (Synopsys)
 - Nilanjan Mukherjee (Mentor Graphics) – Jon Udell (Palmchip)
 - Mike Ricchetti (Intellitech)
- **Meetings**
 - Biweekly teleconference meetings of 1.5 hours
Thanks to Mentor Graphics (Nilanjan) for providing facilities!
 - Password-protected web site at IEEE computer

Draft Releases

- P1500/D0.1 released January 31, 2000
- P1500/D0.2 released May 5, 2000
- P1500/D0.3 released January 4, 2001

Distribution

- PDF document available at CTAG and CTL-TF password-protected web sites and via e-mail to Merged Cores TF
- Selected 'experts' (see under Review)
- Your colleagues?

IEEE P1500/D0.3 Disclaimers

- This is an unapproved draft of a proposed IEEE standard
- All text is preliminary and subject to change
- Certain sections are still empty
- This document cannot be well understood without proper introduction

In order not to create misunderstanding for those previously not involved in IEEE P1500 or for those unaware of the current status of IEEE P1500, we do not yet release this document to the general public!

Table of Contents P1500/D0.3

Title, Abstract, Key Words
Introduction, Participants, Acknowledgements,
Table of Contents

Part 1: Introduction

1. Overview
2. References
3. Definitions, Acronyms and Abbreviations
4. Structure of This Standard
5. Dual Compliance Levels

Part 2: Core Test Language

(see next slide)

Part 3: Scalable Architecture Hardware

(see next slide)

Part 4: Compliance Definitions

1. IEEE 1500 Compliance Level 1
2. IEEE 1500 Compliance Level 2

Annexes

- A. Glossary

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Part 2: Core Test Language

1. Introduction
2. Process/Data Flow
3. Purpose of CTL
4. Introducing CTL
5. Enhancements to STIL that CTL Relies Upon
6. The CTL Data Model
7. Environment
8. CTL Block
9. CoreInstance Block
10. Internal Block
11. ScanInternal Block
12. Relation Block
13. External Block
14. PatternInformation Block
15. Constraints Block
16. ForMode

Part 3: Scalable Architecture Hardware

1. Overview
2. Wrapper Interface Port
3. Wrapper Instruction Register
4. Wrapper Bypass Register
5. Wrapper Boundary Register
6. WIR Instructions
7. P1500 System Chip Configuration

P1500/D0.3 Release Notes

Improvements

- Part 2 on CTL has been revised and cleaned up. Up-to-date with latest version of CTL in December 2000.
- Reorganization of Part 3 on Scalable Hardware. This part now contains sections on: WIP, WIR, Bypass, WBR, WIR Instructions, and SOC configuration. Texts are up-to-date till mid December 2000.
- Document has been transferred from MS-Word to Adobe FrameMaker. This alleviates some of the editorial difficulties and also is in line with what IEEE uses for final preparation.

Known Bugs

- The document is not ready yet. Many (especially introductory) texts are missing. Not all text is completely approved by the various teams.
- List of Working Group members is so volatile, that we have decided not to include in for the moment.
- Some of the text in Part 1, Section 5 ('Dual Compliance Levels') is not in line with what was discussed in the Working Group meeting of August 28+29, 2000 in Dallas, TX.
- We had some problems with the inclusion of figures from other sources than FrameMaker (e.g., Word or PowerPoint). In the meantime, we seem to have found a workable procedure, but not yet all figures have gone through this procedure. Hence, some figures some from small displacements of text.
- In order to reduce the file size, the document is distributed as PDF file. Unfortunately, some of the fine print in the document appear as unreadable lines in the PDF viewer. Apparently this is due to how the PDF is generated. We are still looking into improving this. However, when the document is printed, all text is readable. On request, we can also make the document available as PostScript file (> 5 Mb)

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Proper Viewing in Acrobat

In Adobe's Acrobat

- In File → Preferences → General, disable "Use Greek Text Below xx Pixels"

P1500/D0.3 Review

- Review by Task Force members
 - Luis Basto (Analog Devices) done
 - Maurice Lousberg (Philips) done
 - **YOUR** input is welcomed too!
- Review by selected external experts
 - For P1500/D0.3:
 - Ben Bennetts (Bennetts Associates) done
 - Erica Cota + Luigi Carro (UFRGS / UCSD) done
 - Al Crouch (Motorola) accepted
 - Pat McHugh (Lockheed Martin) accepted
 - Paulo Prinetto & Alfredo Benso (Politecnico di Torino) accepted
 - For subsequent releases, other experts will be asked

P1500 DocTF Continues...

- Continue biweekly teleconference meetings
- 'To Do' list:
 - Taking care of reviewer comments
 - Working together with technical Task Forces to complete texts
 - Writing of (currently missing) introductory texts
- Release of P1500/D0.4 planned for Spring 2001