



CTAG-WBR Tiger Team Update

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Presentation Outline

- Introduction
 - Tiger team active members
- Wrapper Boundary Register (WBR) activity update
 - The WBR in the P1500 Architecture
 - Requirements for Plug-and-Play
 - Changes in the definition of Transfer
 - Documentation update (WBR chapter)
- Tiger team objective for the next draft release



WBR Tiger Team Active Members

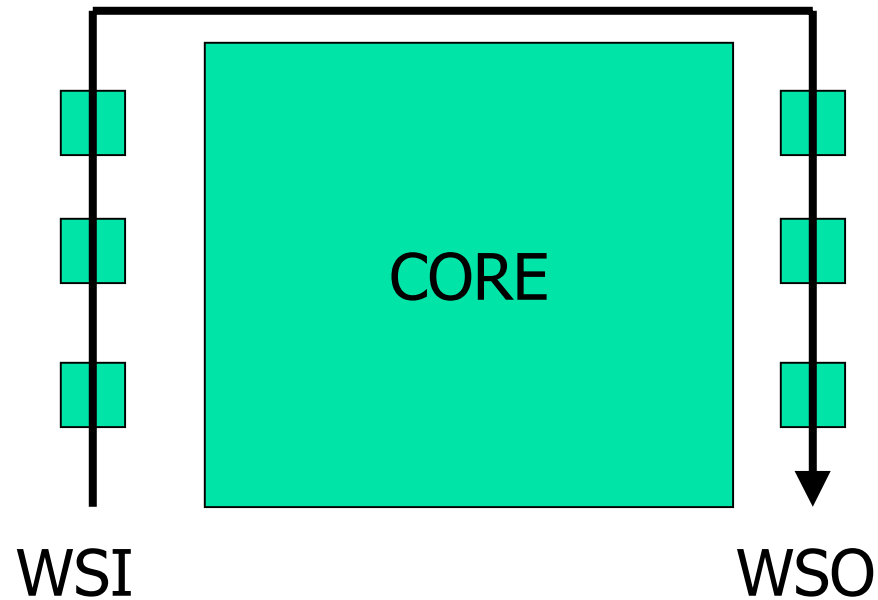
- Francisco da Silva – **Synopsys**
- Grady Giles – **AMD**
- Luis Basto – **Analog Devices**
- Jason Doege – **Inovys**
- Ronald Walther – **IBM**
- Lee Whetsel - **TI**



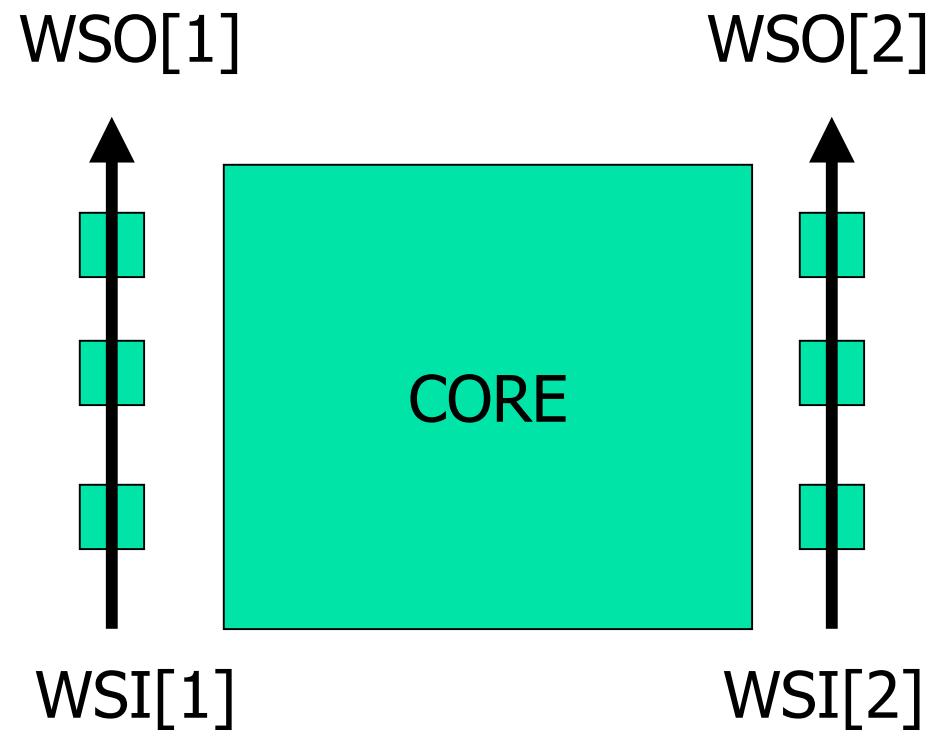
The WBR in the P1500 Architecture

- The WBR in the context of the overall P1500 architecture
 - Introduction to the Serial Interface Layer (SIL)
 - Introduction to the Parallel Interface Layer (PIL)
 - Started to define rules allowing the implementation of PILs from a WBR perspective

Representation of the SIL



Representation of the PIL





Requirements for Plug-and-Play

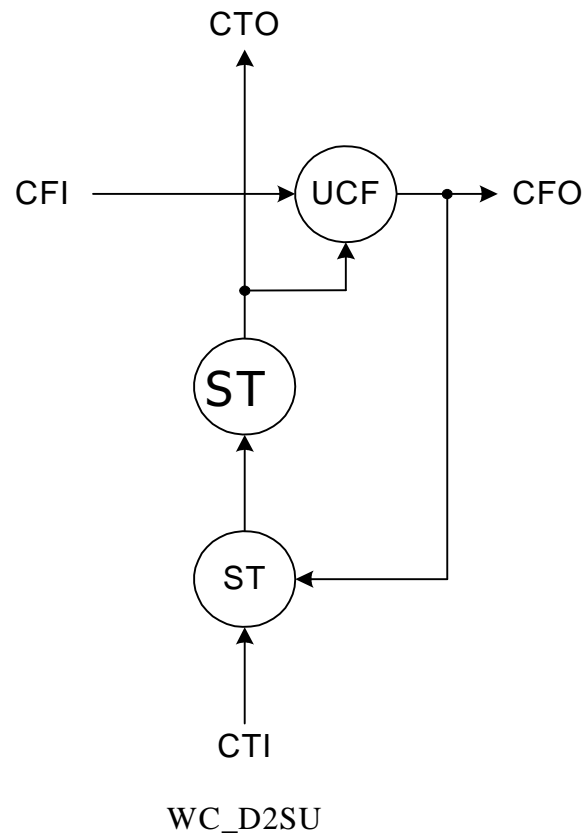
- Defining PnP from a Wrapper perspective (interoperability)
 - Slow operation
 - Timing requirements for PnP
 - Will be released in next draft
- Compatible with the use of auxiliary clocks and shared cells



New Transfer event behavior

- Issues with old definition
 - Required a WBR-specific definition of shift
- Advantages of the new definition
 - WIP and WBR consistently define the shift operation

Impact on some existing cells





WBR Documentation update

- New chapter architecture
 - Created consistency with the other chapters of the draft
 - D0.4 feedback comments
 - Addressed all editorial comments and most of the technical comments. Remaining technical comments to be addressed in the next draft release.



Objective for the next draft release

- Address remaining technical feedback from D0.4
- Define rules and permission to govern the implementation of a PIL
- Addition of “real-life” examples of how to design wrappers for cores provided with patterns
 - Inference of types of wrapper cells to be implemented
 - CTL description before wrapper insertion
 - CTL description after wrapper insertion