August 13, 2010

Minutes of IEEE 1149.1 - Initialize Sub-Group Meeting

Attendees:

Carl Barnhart
CJ Clark
Dave Dubberke
Roland Latvala
Adam Ley
Ken Parker
Francisco Russi
Brian Turmelle

Minutes:

This meeting continued the discussion of the INIT BNF

- No new BNF from Carl due ot computer being down for the week.
- Carl requested clarifiaction on getting P1687 to look at hierarcical structures in PDL. CJ replied that we are using a small enough version of PDL, which we will document in 1149.1, that we do not need to wait. CJ asserted in response to Ken's question that P1687 is moving away from the TAP and that there will be little overlap or confusion if we end up with something different from P1687.
- Carl eplained the array and record type data structures on which his segments are based.
- Discussion on whether segments should be arrays or scalars (or both). Carl agreed to provide examples done either way. CJ will provide an example schematic for Carl to code to.
- CJ opened an extensive discussion on variable length registers. These are not allowed in the current 1149.1 leading to all sorts of industry solutions (kludges). CJ would prefer that he not have to specify register length, but allow the field definitions to build up the register. This requires that all bits of a register be defined as fields and in the correct order as there is no mapping of field bits to the register bits. He would then like to consider some mechanism for making the fields dynamic (selectable) so that variable lenght registers would be supported. The P1687 SIP is one mechanism for such selection. CJ will provide an example of what he would like to see.

Current Status:

Formalize Rules - BNF coding in progress.

BSDL Constructs - - In progress.

Formalize PDL constructs - no activity this week

Actions:

- CK to draw TDR example(s) for hierarchical structures.
- Carl will code CJ's examples both with segments as arrays and as scalars.
- CJ will provide an example of a dynamic register for discussion.

Work still to be done:

Incorporate INIT into 1149.1 Std

Next meeting date: Same time next Friday August $20^{\rm th}$