NDIA Automatic Test Committee Project Report

September 11, 2016
Disneyland Hotel

Overview

- Two projects identified by US Government ATS leadership for industry investigation
 - FPGA Test and Support
 - Standardized Software Architecture for Synthetic Instrumentation

FPGA Test & Support Background

Issues include:

- Multiple manufacturers, each with their own sets of development tools.
- Programming data not consistent between manufacturers for the same functionality.
- Where to put the emphasis in FPGA test? TPS or ATE or somewhere in between? How do we control the interface boundaries between vendor, ATE, and TPS programming?
- No DoD standards or programming style preferences.
 This can lead to portability problems and obsolescence issues.

Our military customers need your participation

- Need a volunteer to lead FPGA task
- Need additional participation on FPGA task.
 Current participants include Mike Seavey (review role), Mike Dewey, Mike Rutledge, Steve Fairbanks, and Wade Lowdermilk
- Team needs to develop a Statement of Objectives
- Anticipate investigation and reporting to take about seven to eight months

Standardized Software Architecture for Synthetic Instrumentation

- This is not a new project but has come back to the committee as something we should explore.
- Originally was examined in 2014. Wade Lowdermilk and Dave Carey presented Trade Study.
- ATS chair asked DoD attendees to discuss the need for this project at the next AMB and NxTest IPT meetings. Howard will report on this activity.
- Lead for project Mike Seavey
- Will need to establish a team if Howard reports specific requests from AMB and NxTest IPT.