



DoD ATS Technical Framework Relationships

Level Definitions

- **UUT Test level**
 - Test and UUT Diagnostics in terms of high level entities, test outcomes and model based descriptions
- **Signal or Independent level**
 - Test Requirements, signal sequence, timing
- **Resource or generic level**
 - General resource features or UUT types
- **Instrument or device level**
 - Specific instrument, driver, and control; independent of an instrument or device function
- **Interface or hardware level**
 - Pin maps (e.g. CTI, VXI)
- *The **dotted line(s)** represent internal boundaries within the ATS Framework areas (UUT, TPS, ATE) which are used to help identify the typical or expected usecase for the key elements.*

DRV Standards and Status

- **IVI Standards**

- IVI-3.1 Driver Architecture Specification
- IVI-3.2 Inherent Capabilities Specification
- IVI-3.3 Standard Cross-Class Capabilities Specification
- IVI-3.4 API Style Guide
- IVI-3.14 Primary Interop Assembly Specification

- **Status**

- In Process

The IVI standards are on hold until issues are resolved

DRV Standards and Status

- **VPP Standards**

- VPP-3.1 Instrument Driver Architecture and Design Specification
- VPP-3.2 r5 Instrument Driver Functional Body Specification
- VPP-3.3 r4.01 Instrument Driver Interactive Developer Interface Specification
- VPP-3.4 r2.3 Instrument Driver Programmatic Developer Interface Specification

- **Status**

- Recommended
- Recommended
- Recommended
- Recommended

AFP, IFP, TSFP Standards & Status

- **AFP Standards**
 - IEEE 1671.5 ATML Test Adapter
 - **IFP Standards**
 - IEEE 1671.2 ATML Instrument Description
 - **TSFP Standards**
 - IEEE 1671.6 ATML Test Station
- **Status**
 - In Process
 - In Process
 - In Process

*AFP, IFP, TSFP elements are completely satisfied with the standards listed above

ICM Standards and Status

- **ICM Standards**
 - VPP 4.3 r2.2 VISA Implementation Specification for Textual Languages
- **Status**
 - Recommended

DIAD/DIAS Standards and Status

- **DIAD/DIAS Standards**
 - IEEE 1232:2010 Artificial Intelligence Exchange and Service Tie to All Test Environments (AI-ESTATE)
- **Status**
 - In Process

*DIAD/DIAS elements are completely satisfied with the standard listed above

DTF Standards and Status

- **DTF Standard**
 - IEEE 1445-1998 Digital Test Interchange Format (DTIF)
- **Status**
 - Recommended

MCI Standards and Status

- **MCI Standard**
 - IEEE 1671.4 ATML Test Configuration
- **Status**
 - In Process (on hold until standard completes major update)

MTDS Standards and Status

- **MTDS Standards**

- IEEE 1636
Standard for Software Interface for Maintenance Information Collection and Analysis (SIMICA)
- IEEE 1636.1-2007
Trial-Use Standard for Software Interface for Maintenance Information Collection and Analysis (SIMICA): Exchanging Test Results and Session Information via the eXtensible Markup Language (XML)
- IEEE 1636.2-2010
Trial-Use Standard for Software Interface for Maintenance Information Collection and Analysis (SIMICA): Exchanging Maintenance Action Information via the Extensible Markup Language (XML)

- **Status**

- In Process
- In Process
(on hold until std completes major update)
- In Process

DFT Standards and Status

- **DFT Standards**

- IEEE 1149.1 2001 Test Access Port and Boundary-Scan Architecture
- IEEE 1149.2 Extended Digital Serial Subset
- IEEE 1149.4 Mixed -Signal Test Bus
- IEEE 1149.5 Module Test and Maintenance Bus Protocol

- **Status**

- Emerging
- Emerging
- Emerging
- Emerging

PROD/PROS Standards and Status

- **PROD/PROS Standards**
 - IEEE 1232:2010 Artificial Intelligence Exchange and Service Tie to All Test Environments (AI-ESTATE)
- **Status**
 - In Process (on hold until models can be reflected in standard)

UDI Standards and Status

- **UDI Standard**
 - IEEE 1641-2010 Signal and Test Definition
- **Status**
 - To be addressed

TPD Standards and Status

- **TPD Standards**

- IEEE P1671.1-2009 ATML Test Description

- **Status**

- In Process (on hold until standard completes major update)

RAI Standards and Status

- **RAI Standards**
 - IEEE1641–2010 Annex K
- **Status**
 - In Process

RTS Standards and Status

- **RTS Standards**
 - IEEE 1671-2010 Annex C
- **Status**
 - Recommended

UTR Standards and Status

- **UTR Standards**
 - IEEE 1671.1-2009 ATML Test Description
- **Status**
 - In Process (on hold until standard completes major update)

FRM Standards and Status

- **FRM Standards**

- VPP-2 System Frameworks Specification 5.1
- IEEE 1671-2010 ATML
- IVI-3.5 Configuration Server Specification
- IVI-3.6 COM Session Factory Specification
- IVI-3.9 C Shared Components Specification
- IVI-3.10 Measurement and Stimulus Subsystems (MSS) Specification
- IVI-3.12 Floating Point Services
- IVI-3.15 IviLxiSync Specification

- **Status**

- Recommended
- In Process
- Emerging
- Emerging
- Emerging
- Emerging
- Emerging
- Emerging

The IVI standards are on hold until issues are resolved

PDD Standards and Status

- **PDD Standards**

- ANSI/EIA 682
- Electronic Design Interchange Format(EDIF)
- IEEE 1671.3 -2007 ATML UUT Description

- **Status**

- On hold; waiting on PDD definition review
- On hold; waiting on PDD definition review
- In Process(on hold until standard completes major update)

RMS Standards and Status

- **RMS Standards**
 - IEEE 1641-2010 Standard for Signal and Test Definition
- **Status**
 - On hold; waiting on RMS element review

RFI Standards and Status

- **RFI Standards**
 - IEEE 1693 Standard for Modular Interconnect Packaging for Scalable Systems
- **Status**
 - To be addressed

MMF Standards and Status

- **MMF Standards**

- JPEG File Interchange Format, Version 1.02
 - ISO/IEC 15444
- MPEG ISO/IEC 13818
- HTML 4.01
- XHTML 1.1
- PNG ISO/IEC 15948
- GIF v89a
- XML 1.0
- XML 1.1:2004
- SVG 1.1

- **Status**

- Recommended
 - Recommended
- Recommended
- Recommended
- Recommended
- Recommended
- Recommended
- Recommended
- Recommended
- Emerging
- Emerging

NET Standards and Status

- **NET Standards**
 - RFC0791 & 0793
- **Status**
 - Recommended

DNE Standards and Status

- **DNE Standards**
- **Status**