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 use case 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
  – In Process
  – In Process
  – In Process
  – 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

*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
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

*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
  - Emerging
  - Emerging

Return to Diagram
NET Standards and Status

• **NET Standards**
  - RFC0791 & 0793

• **Status**
  - Recommended
DNE Standards and Status

- DNE Standards
- Status