

IEEE Standard for Automatic Test Markup Language (ATML) Test Station Description

IEEE Standards Coordinating Committee 20

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IEEE Standards Coordinating Committee 20 on
Test and Diagnosis for Electronic Systems

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IEEE Std 1671.6™-2015
(Revision of
IEEE Std 1671.6-2008)

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**IEEE Standards Coordinating Committee 20 on
Test and Diagnosis for Electronic Systems**

Approved 26 March 2015

IEEE-SA Standards Board

Abstract: An exchange format, using extensible markup language (XML), for identifying all of the hardware, software, and documentation associated with a test station is specified in this document. This test station may be used with a test program set to test and diagnose a unit under test.

Keywords: ATML instance document, automatic test equipment (ATE), Automatic Test Markup Language (ATML), automatic test system (ATS), IEEE 1671.6™, test station, XML schema

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PDF: ISBN 978-0-7381-9624-4 STD20166
Print: ISBN 978-0-7381-9625-1 STDPD20166

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Introduction

This introduction is not part of IEEE Std 1671.6™-2015, IEEE Standard for Automatic Test Markup Language (ATML) Test Station Description.

This child, or dot, standard, also known as an ATML component standard, provides for the definition of the Test Station XML schemas, and contains references to examples; both of which accompany this standard.

These XML schemas provide for the identification and definition of a test station.

ATML's XML schemas define the basic information required within any test application and provide a vehicle for formally defining the test environment by defining a class hierarchy corresponding to these basic information entities and provide several methods within each to enable basic operations to be performed on these entities. ATML component standards within the ATML framework define the particular requirements within the test environment.

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1. Overview

1.1 General

Automatic test markup language (ATML) is a collection of IEEE standards and associated extensible markup language (XML) schemas that allows automatic test system (ATS) and test information to be exchanged in a common format adhering to the XML standard.¹

The ATML framework and the ATML family of standards have been developed and are maintained under the guidance of the Test Information Integration (TII) Subcommittee of IEEE Standards Coordinating Committee 20 (SCC20) to serve as a comprehensive environment for integrating design data, test strategies, test requirements, test procedures, test results management, and test system implementations, while allowing test program (TP), test asset interoperability, and unit under test (UUT) data to be interchanged between heterogeneous systems.

This standard (as well as the XML schemas and XML instance document examples² that accompany this standard) is intended to be used in identifying and documenting a test station which may be utilized during the testing of unit under tests (UUTs). This information includes the mechanical, electrical and software interfaces of the test station.

¹ This information is given for the convenience of users of this standard and does not constitute an endorsement by the IEEE of this consortium standard. Equivalent standards or products may be used if they can be shown to lead to the same results.

² The XML schemas and examples that accompany this standard are available at the locations defined in Clause 6.