RISC-V Server Platform Test Specification

Server Platform Task Group

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Preamble

This document is in the Development state

Assume everything can change. This draft specification will change before being accepted as standard, so implementations made to this draft specification will likely not conform to the future standard.

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Contributors

This RISC-V specification has been contributed to directly or indirectly by (in alphabetical order):

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Chapter 1. Introduction

The RISC-V Server Platform Test specification defines a set of tests to verify if the requirements specified in RISC-V Server Platform specification are implemented. The tests specified in this specification are not intended to exhaustively verify the implementation. In most cases the tests only check for existence of the feature. Future versions of this specification may include more exhaustive tests.

The Server Platform specification builds on top of the Server SoC, Boot and Runtime Services and Platform Security specifications, which in turn have their own test specifications and/or compliance requirements. This test specification does not duplicate requirements in these dependent test specification, but provides additional tests on top the the tests already defined in these other documents.

The tests in this specification are documented use the following format:

TEST_ID#	Test algorithm
AB_CAT_NNN_MMM	The `CAT_NNN` identifies a requirement in the RISC-V Server SoC specification. Each requirement is associated with one or more tests identified by `MMM`. The test IDs are prefixed with two character prefix - `AB`. If character in position `A` is `M` then the test is for a requirement that MUST be supported and this test MUST pass. If character in position `A` is `O` then the test is for a requirement that SHOULD or MAY be supported; such tests may be skipped if the requirement is not implemented. The tests record if optional features were present in the test output log. The character in position `B` indicates the nature of the test. If this character is `F` then the test exercises some or all of the functionality associated with the feature. If the character is `E` then the test determines for evidence that the feature is implemented (e.g., check ACPI tables) but does not functionally exercise the feature.

This specification groups the tests in the following broad categories:

- Hardware
- Firmware
- Security

1.1. Glossary

Most terminology has the standard RISC-V meaning. This table captures other terms used in the document.

Table 1. Terms and definitions

Term	Definition

Chapter 2. Server Platform Test Specification

2.1. Server Platform Hardware Requirements

2.1.1. RISC-V SoC

ID#	Algorithm

2.2. Server Platform Firmware Requirements

ID#	Algorithm

2.3. Server Platform Security Requirements

ID#	Algorithm

Bibliography