

CXL Compliance Overview and Update Flash Memory Summit 2023

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CXL Compliance Stage Definitions





- Pre-FYI
 - Test software in Beta State. Tests are under development
- FYI Phase
 - Initiated by a formal release of both the CV app, the EV test criteria, and the release of test
 capabilities by approved equipment vendors
 - Tests can be removed but not added at this stage
 - Exiting the FYI stage is determined by data collected at CXL workshops
- General Testing
 - Inclusion on Integrator's List

https://www.computeexpresslink.org/integrators-list

CXL Compliance Current Status



- CXL Compliance requirements are listed in chapter 14 of the base spec
- Devices supporting the CXL 1.1 specification are eligible for the integrators list
- CXL 2.0 testing is currently in the FYI stage anticipate moving to General testing in early 2024
- CXL 3.0 testing is in development

Compliance Changes since CXL 2.0 release



- Compliance mode DOE required, no longer optional
 - DVSEC interface to capabilities removed in CXL 3.0
- Additional error injection capabilities defined in CXL 3.0 DOE
- CXL 2.0 Engineering Change Notices have moved into the main spec
 - Secure IDE Establishment
 - CXL.mem error injection
- Cleanup of test format
 - Test Topologies
 - Pre-requisites
 - Pass/fail criteria

Test Revisions and Groupings



- Test Features are being implemented asynchronously from CXL major revisions
- Test Groups offer a mechanism to provide compliance information outside of strict major revision boundaries
- Grouped by sub-sections of test spec and/or ECN's
- Compliance Statements can be made against test groups
 - CXL 1.1 Core
 - CXL 2.0/1.1 Backward Compatibility
 - CXL 1.1/2.0 Mem



Thank You

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