

AXIe : AdvancedTCA[®] Extensions for Instrumentation and Test

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Topics

- **Status**
- **Products**
- **Reducing the cost and complexity barrier**
- **AXIe 1 Revision 2**
- **Future directions**

Status

- The AXIe standard has is continuing to develop
- AXIe 1 revision 2 now ratified
- Our membership expanding:



- The consortium's effort has been to expand the standard and develop/sponsor a path to reducing the cost of the module infrastructure to simplify developing new modules

Products

- AXIe-1 Base Architecture Specification Products
 - M9703A AXIe 12-bit High-Speed Digitizer & DDC enhancements -
 - ADC 6000 Series AXIe-based Digitizer Family –
 - M8190A AWG (Arbitrary Waveform Generator)
 - M8192A synchronization module for the M8190A AWG
 - M9536A AXIe Embedded Controller
 - M9502A 2-slot AXIe Chassis with Embedded System Module
 - M9505A 5-slot AXIe Chassis with Embedded System Module
 - U4301A PCIe Gen 3 Analyzer Module
 - U4421A Protocol Analyzer and Exerciser for MIPI D-PHY Interfaces
 - U4998A HDMI and MHL Protocol/Audio/Video Analyzer and Generator Module
- AXIe-3.1 Semiconductor Test Extension Products
 - AX500 - AXIe Benchtop System
 - AX520 – AXIe/PXI Benchtop / Production System
 - AX1020/AX1040 – Mid Range Benchtop /Production System
 - AX2820 – High Pin Count Production System
 - AXIe 3.1 Instrument Module Development Starter Kit



Reducing the cost and complexity barrier

- **For module developers,**
 - A low cost IPMI controller mezzanine card that fits onto a standard AXIe module has been developed by Elma with input and review by the Consortia. This card allows users to quickly and cost effectively deploy the required IPMI functionality without having to become experts on this functionality from ATCA

Reducing the cost and complexity barrier

- **An AXIe Module Development Kit**
 - [Hiller Measurements](#) is releasing the MiAXIe© AXIe Development System. Similar to their MiPXIe© System, the product provides the hardware and software interfaces for an AXIe module that can be quickly adapted to a customer's application. In its initial release, Hiller Measurements offers the MiAXIe© System as a design service, with a standard hardware development kit scheduled for release in 2014.

AXIe-1 Revision 2

- Added E-keying extensions for multiple slot modules.
- Enhanced the Local bus electrical spec to allow for Higher speed devices without requiring E-keying
- Add a CLK100 feedback pair to the system slot. This pair would provide feedback from the CLK100 distribution buffer to the timing resources in the System module.
- Removed the definition of instrument hubs
- Added startup and shutdown sequencing requirements to provide for orderly start up and shutdown of AXIe chassis.
- General clean up of Errata items

Future Directions

- Pursue Interoperability “plug fest “ events as more vendors introduce products
- Investigate the feasibility and timeline for conformance testing.
- AXIe Consortium manages AXIe-1, AXIe-2 and AXIe-3.1 specifications
- For more information, go to www.axiestandard.org or email Bob Helsel, Executive Director at execdir@axiestandard.org

Additional slides