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Press release distribution date: August 8 at 8 am ET / 5 am PT

UCle™ (Universal Chiplet Interconnect Express™) Consortium Releases its 1.1 Specification

Key highlights:

- UCle continues to gain momentum with its 1.1 specification release, delivering valuable improvements that extend reliability mechanisms, provide enhancements for the automotive industry, enable lower cost implementations, and establish compliance and interoperability testing specifications.
- UCle Consortium establishes a new Automotive Working Group to address automotive industry needs.
- The UCle 1.1 Specification is now available to the public.

August 8, 2023 – Beaverton, OR – Today, the UCle Consortium announced the public release of UCle™ (Universal Chiplet Interconnect Express™) 1.1 Specification to deliver valuable improvements in the chiplet ecosystem, extending reliability mechanisms to more protocols and supporting broader usage models. Additional enhancements are included for automotive usages – such as predictive failure analysis and health monitoring – and enabling lower-cost packaging implementations. The specification also details architectural specification attributes to define system setups and registers that will be used in test plans and compliance testing to ensure device interoperability. The UCle 1.1 Specification is fully backward compatible with the UCle 1.0 Specification.

“UCle Consortium is living up to its mission and establishing a vibrant chiplet ecosystem as the industry musters around UCle technology,” said Dr. Debendra Das Sharma, chairman, UCle Consortium. “The UCle 1.1 Specification was developed by leaders in the industry to advance the chiplet ecosystem and address significant demand for full stack streaming protocol enhancements. We’re proud of the progress this release represents toward realizing our vision and our underlying efforts to establish a chiplet ecosystem by developing a robust compliance program.”

Highlights of the UCle 1.1 Specification:

- Enhancement for automotive includes runtime health monitoring and repair for high reliability applications
- New usages for streaming protocols with full UCle stack, including simultaneous multiprotocol support with end-to-end link layer functionality
- Cost optimization for advanced packaging resulting from new bump maps
- Enhancements for compliance testing

The UCle 1.1 Specification is available to the public by request at www.uciexpress.org/specification.

Based on significant market demand from the automotive industry for chiplets built around UCle technology, the UCle Consortium is pleased to announce the formation of a new Automotive Working Group. UCle Consortium Contributor members alongside leadership have already launched this new working group, beginning the development of protocol enhancements for runtime health monitoring and repair.

Meet UCle Experts at Flash Memory Summit (FMS)

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The UCle Consortium will present a UCle tutorial session introducing the new features found in the UCle 1.1 specification at FMS, on August 8, from 1:00 – 5:00 pm PT, in Room 207 at the Santa Clara Convention Center. FMS attendees are also invited to visit the UCle kiosk within the Open Standards Pavilion on the exhibitor show floor from August 7-10. View the full [FMS agenda](#) for detailed information on exhibition schedule and UCle presentations.

Resources:

- UCle 1.1 Specification
- UCle Consortium member statement of support
- UCle 1.1 White Paper

About UCle™ Consortium

The UCle Consortium is an industry consortium dedicated to advancing UCle™ (Universal Chiplet Interconnect Express™) technology, an open industry standard that defines the interconnect between chiplets within a package, enabling an open chiplet ecosystem and ubiquitous interconnect at the package level. UCle Consortium is led by key industry leaders Advanced Semiconductor Engineering, Inc. (ASE), Alibaba, AMD, Arm, Google Cloud, Intel Corporation, Meta, Microsoft Corporation, NVIDIA, Qualcomm Incorporated, Samsung Electronics, and Taiwan Semiconductor Manufacturing Company. For more information, visit www.UClexpress.org.