

SNIA Strategic Alliances Program

Alliance Ratification Record

In reference to:

CXL™ Consortium, Inc. (CXL) / SNIA

Version 1.0

Revision Date: August 28, 2020

Current Status: FINAL



This document is SNIA and CXL Consortium Confidential until released here: http://www.snia.org/alliances/ and here: https://www.computeexpresslink.org/industry-liaisons

Revision History

Date	By:	Comments
7/01/20	Willie Nelson	Initial draft – v.0.7
7/08/20	Willie Nelson	v.0.72 - updates from CMSI Marketing review, logo updates by Marty, ready for SAC review
7/15/20	Willie Nelson	v.0.8 – input from SAC incorporated, and passed to CXL Consortium for review/input
8/5/20	Willie Nelson	v.0.9 - Accepted and commented on inputs from CXL Consortium. Reviewed and approved by CMSI Marketing Committee, and passing to SNIA SAC/BoD and back to CXL BoD for approval
8/12/20	Willie Nelson	v.0.91 - Removed comments and added approval from CXL Marketing/BoD
8/13/20	Willie Nelson	v.0.92 – Revised 'Marketing Communications' section – needs to be re-approved by CXL orgs, but SNIA Marketing and SAC approve current version
8/21/20	Willie Nelson	v.0.93 – re-approved, and ready for SNIA BoD review/approval
8/28/20	Willie Nelson	v.1.0 – approved by SNIA BoD, and appropriate changes made to move doc to FINAL version 1.0



Summary

This document defines the relationship framework between the CXL Consortium, Inc. and SNIA as part of the SNIA Strategic Alliance Program. Once approved by both parties, this document is published on http://www.snia.org/alliances/.

The SNIA Strategic Alliance Committee (SAC) is responsible for keeping this document up to date.

Alliance Organizations

Please detail if this alliance concerns specific groups within each organization:

<u>CXL Consortium, Inc. (CXL)</u> and the <u>Storage Networking Industry Association</u> (SNIA)

The primary purpose of this alliance is to enable the education of interested individuals, including developers, implementors, and end users, and the subsequent adoption of these technologies. Marketing is the key mechanism to enable the execution of that objective, and as a result is the focus of this alliance agreement.

- CXL
 - Initially, the primary focus is with the CXL Marketing Work Group and Marketing activities, but may be expanded in future
- SNIA
 - Initially, engagement is with the Compute, Memory, and Storage Initiative (CMSI)
 - Specifically, within CMSI, the primary focus is with the CMSI Marketing Committee

Background and Purpose

This section describes any relevant background information about the alliance relationship. Ratified Alliance records should be updated on a regular basis at a minimum of once every 2 years. This section of the ratified alliance record may contain information on previous joint accomplishments between the organizations, or in a new relationship, background information about the ally organization.

CXL Consortium, Inc.

 Compute Express Link™ (CXL™) is a new high-speed CPU-to-Device and CPU-to-Memory interconnect designed to accelerate next-generation data center performance. The CXL Consortium was founded in early 2019 and was incorporated in Q3 of 2019. CXL technology maintains memory coherency between the CPU memory space and memory on attached devices, which allows resource sharing for higher performance, reduced software stack complexity, and lower overall system cost. This permits users to simply focus



on target workloads as opposed to the redundant memory management hardware in their accelerators.

CXL is designed to be an industry open standard interface for high-speed communications, as accelerators are increasingly used to complement CPUs in support of emerging applications such as Artificial Intelligence and Machine Learning. The CXL Specification 1.1 enables a high-speed, efficient interconnect between the CPU and platform enhancements and workload accelerators, such as GPUs, FPGAs and other purpose-built accelerator solutions. The technology is built upon the well-established PCI Express® (PCIe®) infrastructure, leveraging the PCIe 5.0 physical and electrical interface to provide advanced protocol in three key areas:

- o I/O Protocol
- Memory Protocol, initially allowing a host to share memory with an accelerator
- Coherency Interface

SNIA

- The Storage Networking Industry Association (SNIA) is a non-profit organization made up of member companies spanning information technology. A globally recognized and trusted authority, SNIA's mission is to lead the storage industry in developing and promoting vendor-neutral architectures, standards and educational services that facilitate the efficient management, movement and security of information.
- SNIA Compute, Memory, & Storage Initiative (CMSI) Marketing Committee
 - The CMSI Marketing committee is responsible for planning and managing CMSI related marketing, PR activities and events and activities (e.g., requirements collection). This committee manages a budget and activities to support web training/demonstrations, trade show attendance and messaging, and CMSI related outbound communications. CMSI Marketing Committee has access to SNIA Marketing tools, including mailing list of 40K+ individuals, webinars, educational library, and other industry marketing materials.



Alliance Benefits

This section lists the benefits of the alliance partnership to the SNIA, CXL, and the IT industry as a whole. Benefits should be quantifiable. They should clearly describe the value that the alliance relationship will create in relation to the SNIA Strategic Objectives (http://www.snia.org/about/corporate_documents/SNIA_ThreeYear_Strategic_Plan.pdf).

CXL will benefit from:

- Leveraging established SNIA industry membership and contacts for information exchange, collaboration on use case definitions, and development of solutions
- Access to the storage service and hardware platform expertise within the SNIA and its membership
 - Scale-out of messaging to interested industry participants
 - Opportunity to participate in webinar/training creation in SNIA developed content
 - Webinars/training on how to acquire and test CXL storage devices

SNIA will benefit from:

- Collaboration to ensure consistent messaging to industry and partners
- Unified messaging regarding uses of CXL in SNIA/CMSI environments
- Collaboration for POC's and products using CXL in SNIA/CMSI designated products
- Development and distribution of educational webinars using CXL in SNIA/CMSI environments
- Access to CXL developers and use models to further align end user benefits across SNIA initiatives

Both organizations benefit from:

- Coordination across both organizations in various working groups
- Ensure SNIA and CXL standards are coordinated and aligned
- Coordinate for cross-marketing of SNIA, CXL, and industry conferences, events, and social media.
- Use same terms and definitions for use models and devices in systems
- High-level coordination between the two organizations
- Promotes SNIA and CXL joint technology definition and usage to member companies

Alliance Scope of Activity

This section describes the scope of the alliance relationship. This section lists the specific SNIA groups (Committee, Forums, Technical Workgroup, Regional Affiliate...) that will be involved in delivering the work as well as the ally's groups.

This relationship will be focused on Joint Marketing efforts, specifically between the CXL Marketing Work Group and the SNIA/CMSI Marketing Committee.

• Cross-promotion (including social media, blogs, email blast, newsletter inclusion) of news and events by both organizations:



Webcasts

 Topic to be reviewed as applicable to both organizations, and detailed in Work Register as required

Events

- CXL Training Events, Storage Developer Conference, SNIA Annual Members Symposium
- Industry News
 - Topic to be reviewed as applicable to both organizations
 - Joint announcements
- o Industry Terms Definition
 - SNIA Dictionary to be utilized for defining relevant storage terminology and be referenced/promoted by both orgs

Marketing Communication

- SNIA/CMSI Marketing representatives and CXL Marketing WG representatives will communicate when there are relevant updates available
- To facilitate these communications, meetings will be held as required between key individuals in each organization
- Industry Event Participation
 - Share event calendars
 - Coordination at industry events can include shared booth space, BOF meetings, literature display
 - Topic to be reviewed as applicable to both organizations, and detailed in Work Register as required

Logo Utilization

- CXL may use the SNIA Logo in educational material, in web content, and in presentations per approved guidelines
- SNIA may use the CXL logo in educational material, in web content, and in presentations per approved guidelines

Wordmark Utilization

- Use of CXL wordmarks is not restricted in educational material, web content, presentations, and specifications per approved guidelines
- Use of SNIA wordmarks is not restricted in educational material, web content, presentations, and specifications per approved guidelines

Access

- SNIA CMSI and CXL Consortium may want to provide public documentation and collateral to each other. This information can be exchanged publicly, or not
 - For public information, both parties will post to websites or file repositories
 - Public work in progress can be published as "Draft", while finished work will be indicated with "Final" and/or "v.1.0" (or later)



 SNIA CMSI and CXL Consortium can host meetings to exchange and discuss any/all public information, and to make changes/update documents as required



Milestones / Dates

This section contains the list of milestones that will be accomplished by the alliance partnership. Milestones should be oriented towards specific objectives that have a predefined completion date. For example, white papers, profiles, best practice documents, participation in SNIA or other IT events, and contributions to SNIA or other organization specifications.

These dates are for the Alliance Agreement review and approval events only. All other specific milestones will be detailed in Work Registers, rather than here in the Alliance Agreement itself, to easily allow for expansion of the alliance in the future.

Milestone/Deliverables	Timeframe	Status
CXL Marketing WG review and approval	July 2020	Complete
SNIA CMSI Marketing Committee review and approval	July 2020	Complete
SNIA SAC review and approval	August 2020	Complete
SNIA Board approval	August 2020	Complete
CXL Board approval	August 2020	Complete

Alliance Record Review Date

Ratified Alliance records should be reviewed on a regular basis to update progress on the milestones and to adjust the alliance records based on changes in objectives between the alliance organizations. This section identifies the time frame when the alliance record will be reviewed. It should be less than two years from the date when the alliance proposal was ratified.

To be reviewed yearly, or when new terms are necessary to be added to the Alliance Agreement (whichever comes first).

Contacts

Identify one or more members from each organization that will act as points of contact between the two organizations.

CXL	Name	Email
CXL Marketing Work Group	Kurt Lender / Glenn Ward	mkttf@computeexpresslink.org
CXL Marketing WG Co-chair	Kurt Lender	Kurt.lender@intel.com
CXL Marketing WG Co-chair	Glenn Ward	gward@microsoft.com

SNIA	Name	Email
Strategic Alliance Co-chair	Arnold Jones / Leah Schoeb	Chair-strategicalliances@snia.org
CMSI Marketing Co-chair	Tim Lustig / Willie Nelson	cmsi-marketing-chair@snia.org



Appendix A: Approval Matrix

This section will not be published on the SNIA website, but will be refreshed any time changes are made or additional Work Registers are added.

	Decision	Date	Comments
SNIA CMSI	Approved	8/5/20	Ready for review/approval by SAC, and passed back to CXL for Marketing WG formal approval
SNIA Strategic Alliance Committee (SAC)	Approved	8/13/20	Approved v.0.92 – ready for BoD review/approval
SNIA Board of Directors (BOD)	Approved	8/28/20	Approved v.0.93 – move to v.1.0/Final

	Decision	Date	Comments
CXL Marketing WG	Approved	8/11/20	
CXL Board of Directors	Approved	8/12/20	Approved as provided in v.0.92 dated 8/13/20 – returned to SNIA for final approval



Appendix A: Work Register #1

Initiated: July 2020

This Work Register is created between SNIA and CXL to formally define the scope, benefits, and deliverables of the alliance. The register helps all organizations coordinate efforts to achieve the stated goals and objectives. This initial (#1) Work Register is targeted at co-marketing efforts between SNIA CMSI and CXL.

Activities/Milestones/Dates

The following activities are listed as definitive objectives to occur during the duration of this work register, but this list does not limit other additional collaborative activities in any way. Primary owners are indicated by color (CXL/SNIA):

Milestone/Deliverables	Resp. Team	Timeframe
CXL 2.0 Specification released	CXL	2020
CXL to participate with at least one technical presentation at 2020 SDC (scheduled for September)	CXL	2020
Collaborate, develop, and release webinar showcasing CXL usages in CMSI environments	SNIA	(CXL 2.0) +1Q
Collaborate, develop, and release webinar/training on how to acquire, utilize, and test CXL device(s) in CMSI environments	SNIA	(CXL 2.0) +2Q
Define, develop, release, and co-market additional CXL related webinar/training, in coordination with CXL marketing team, as needed by products and marketing activities	SNIA	As Mutually Agreed Upon
CXL 3.0 Specification released	CXL	2021

Access & Limitations

No additional access nor limitations required for this Work Register

Work Register Review Date

The next review date is expected to be on or before December 2021

Additional Resources Identified / Points of Contact:

None