Meta’s CXL Journey and Learnings in Linux

Compute Express Link (CXL) is a new open interconnect technology built on top of PCIe. Among other features, it enables memory expansion, unified system address space and cache coherency. It has the potential to enable SDM (Software Defined Memory) and emerging usage models of accelerators.

Meta has been working on CXL with current focus on memory expansion. This presentation will discuss Meta’s experiences, learnings, pain points and expectations for Linux kernel/OS to support CXL’s value proposition and at-scale data center deployment. It touches upon aspects such as transparent memory expansion, device management at scale, RAS, etc. Meta looks forward to further collaboration with the Linux community to improve CXL technology and to enable the CXL ecosystem.

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