PCI-Express (PCIe) 4.0 doubles the throughput of the previous PCI-SIG specification, achieving up to 32 GBPS bandwidth, substantially reducing the inherent latency and power usage caused by components required to convert host PCIe data for other protocols.

Companies like Broadcom are leading innovation in switching technologies to accelerate workloads for the most demanding applications. The company’s new PEX88000 PCIe Gen 4.0 family of switches builds on Broadcom’s market leading family of PCIe Gen 3.0 PEX9700 and PEX8700 products. To further drive adoption in the data center, qualified testing platforms upon which research and development departments can run experiments are required in order to reduce the time it takes to bring stable, PCIe Gen-4 products to the marketplace.

To meet this need Broadcom and Liqid have collaborated to deliver a comprehensive PCIe 4.0 Reference Design Kit (RDK). The RDK is a purpose-built, turn-key solution to allow rapid prototyping, development, and qualification of solutions leveraging an intelligent Gen-4 fabrics built on Broadcom PEX88000 and managed via Liqid Command Center composable infrastructure software to deliver maximum hardware flexibility and ease of use. Users can begin test and development by writing software against a comprehensive RESTful API or using the intuitive user interface (GUI) directly.

Broadcom’s new PEX88000 PCIe Gen 4.0 switches dramatically increase performance and availability of valuable data center resources. The PEX88000 RDK enables rapid prototyping and testing of Gen-4 PCIe devices to deliver the next generation data center solutions.
REFERENCE DESIGN KIT SPECIFICATIONS

Model: LQD8465
Description: Broadcom Reference Design Kit (RDK) // Liqid Composable LQD8465
Part Number: L8465-011RDK-B40

The RDK includes all the necessary gear to get started with application testing for these powerful new data center devices, including:

- **Software**
  - Liqid Command Center Management Node

- **Composable Fabric**
  - 24-Port Gen4x4 PCIe Fabric Switch Built on PEX88000

- **Expansion Chassis**
  - Gen4 Expansion Chassis with 8-Slots (Gen4x16 per Slot)

- **HBA**
  - 2x Gen4x16 HBA (For Host Connections)

- **Cables**
  - 16x Mini-SAS HD Cables Gen4

*Compute Nodes Not Included*