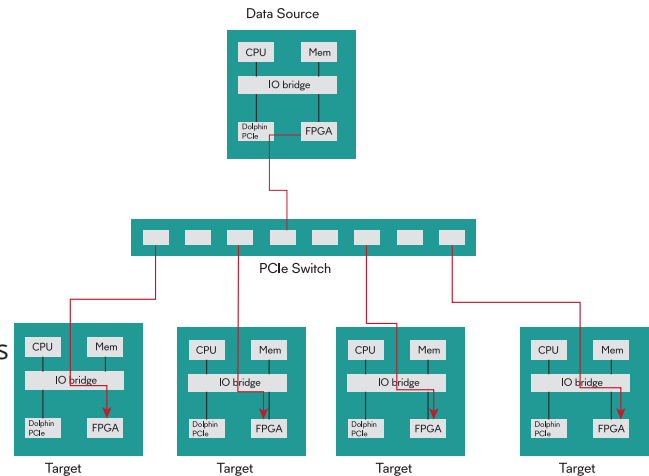# PCIe Multi-cast

Reflective Memory Solution

Our reflective memory or multi-cast solution reinterprets traditional reflective memory offerings by using a modern high speed switched architecture. A PCIe switched architecture employs multi-cast and switches vs the traditional ring approach. A single bus write transaction is sent to multiple remote targets through the switched network. PCI Express multi-cast results in a lower latency and higher bandwidth reflective memory solution.

Benefits

• Minimal delay enables real-time applications to benefit from a significantly reduced total communi-cation time

• Uses main memory or device memory. Reading data in main memory is significantly faster than solutions storing data in specialized PCIe device memory located in the computer IO system

• Multi-casting of data to all switch ports simultaneously

• Extremely low latency PCIe Fabric - Less than 1 ms of application-to-application latency

Features

Data in main memory or device memory	Fair arbitration and sharing of bandwidth
Data is multicast by a centralized switch fabric	Eliminates significant delays between the first and the last node in the network receiving the data
Each PCI Express switch will send data out on all connected ports simultaneously	Hardware based CRC and re-transmission