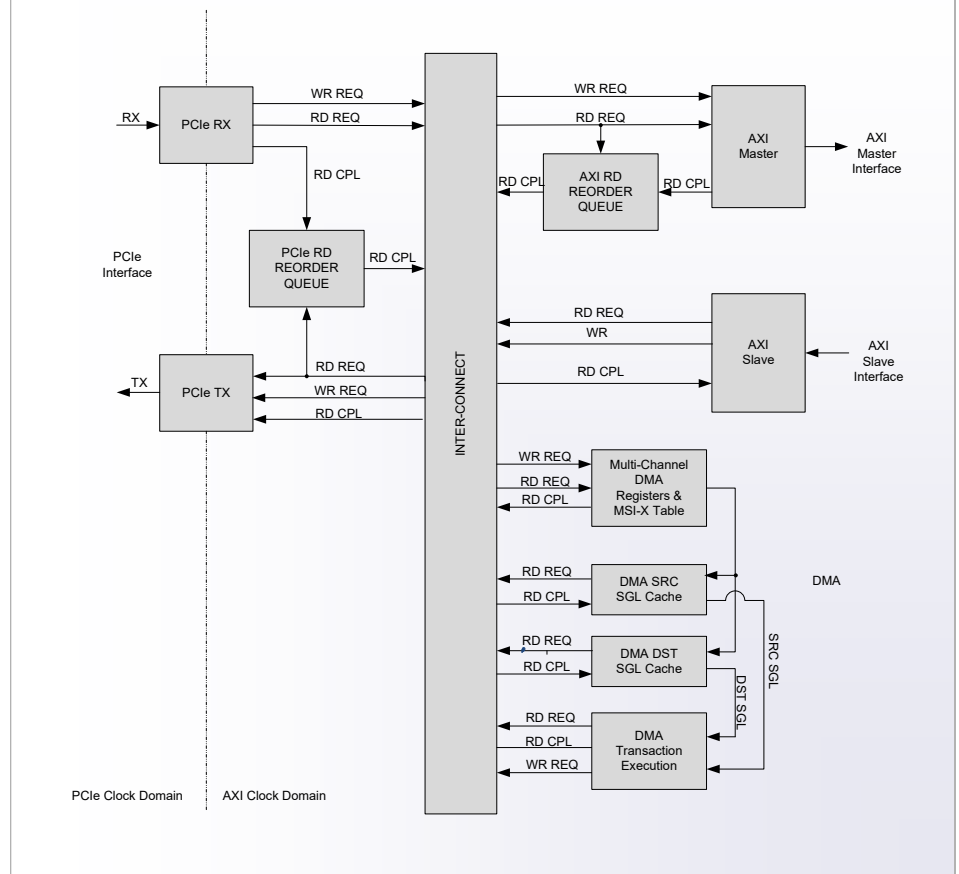


## Product Highlights

- Provides high performance PCIe-AXI Bridge and/or scatter-gather DMA
- Works with Northwest Logic Expresso Cores and FPGA PCI Express hard cores
- Supports memory-mapped and streaming (FIFO) DMA operation
- Support for up to 1024 DMA Channels
- Supports Endpoint and Root Port applications
- Supports AXI data widths 32, 64, 128 or 256-bit
- Supports PCIe Multi-Function and SR-IOV capability
- Fully hardware validated
- Companion Windows and Linux Expresso DMA Drivers available
- Provided with a PCI Express Testbench
- Delivered fully integrated with target PCI Express core
- Minimal ASIC gate count
- Source code available
- Customization and Integration services available

## Block Diagram



## Product Overview

The Northwest Logic Expresso DMA Bridge Core provides high-performance DMA and/or bridging between PCI Express and AXI for both Endpoint and Root Port applications.

Key features include:

- Provides high performance PCIe-AXI Bridge and/or scatter-gather DMA operation
- Works with Northwest Logic soft Expresso Cores and FPGA hard cores
- Provides complete Root Port Bridging support
- Supports memory-mapped/streaming (FIFO) DMA operation
- Can be configured with multiple DMA Channels which are independently controlled by software
- Provides Address translations and security support
- Supports legacy, MSI, MSI-X and local AXI interrupts

Using the core eliminates the need for the user to implement their own DMA and/or bridging design thus significantly reducing development time and risk.

In addition, Northwest Logic provides companion Windows and Linux Expresso DMA Drivers. The Expresso DMA Driver works hand-in-hand with the Expresso DMA Bridge Core.

Northwest Logic also provides board support packages for a wide variety of third party PCI Express boards. This support packages include a working FPGA design, Driver and GUI binaries. Contact Northwest Logic for more information.

Northwest Logic also provides IP Core customization services. Contact Northwest Logic for a quote.

### Product Deliverables:

- Core (Netlist or Source Code)
- Testbench (Source Code)
- Complete Documentation
- Expert Technical Support & Maintenance Updates