



## Solution Includes:

- **Expresso Cores**
  - PCI Express 5.0, 4.0, 3.0, 2.1 and 1.1 support
  - x16, x8, x4, x2, x1 including bifurcation support
  - Endpoint, Root Port, Dual Port & Switch support
  - Multi-Function and SR-IOV support
- **DMA Cores**
  - High-performance, multi-channel, scatter-gather DMA operation
  - FIFO and Memory mapped DMA support
  - Supports host-based and local descriptors
  - AXI4/3 Interface support
  - Support Northwest Logic soft cores and FPGA hard cores
- **DMA Drivers**
  - Manages DMA transfer to/from PC Memory
  - Windows and Linux support
  - Includes Command Line Interface (CLI) test application
- **Expresso Testbench**
  - Full-featured PCI Express Bus Functional Model and example test scripts

## Key Features:

- **Complete Solution**
  - Includes complete PCIe and DMA support
  - Flexible PHY interface supports all PIPE compatible PHYs
  - Delivered fully integrated and verified with target PCIe PHY
  - PCIe standard compliant and PCI-SIG certified
  - Silicon proven
- **High Performance**
  - Supports full-duplex, scatter-gather DMA operation
  - Supports high-performance PCIe-AXI bridging
  - Provides maximum bandwidth across a wide range of applications
- **Easy-To-Use**
  - Simple interface, easy to configure, well-documented
- **Comprehensive Support**
  - ASIC, Structured ASIC and FPGA support
  - Expert technical support provided directly by designers
  - Integration and customization services available