Product Highlights

- Works with Northwest Logic Expresso DMA Core to provide high-performance, scatter-gather DMA operation
- Fully supports overlapped DMA operation
- Supports up to 1024 channels
- Windows and Linux versions have a common API
- Supports Addressed transfers
- Supports 32 and 64 bit system addressing
- Supports legacy, MSI, MSI-X and local AXI interrupts
- Performs parameter checking
- Can be quickly customized to create an application-specific driver
- Includes Command Line Interface (CLI) test application
- Delivered as Source code
- Customization and Integration services are available

Product Overview

The Expresso DMA Driver is specifically designed to be used with the Northwest Logic Expresso DMA Core. It supports all DMA modes supported by the Expresso DMA Core. Together the driver and core provide a complete, pre-packaged, flexible DMA system.

The Expresso DMA Driver includes support for:
- Device registers and memory reads and writes
- DMA read and write transfers
- Low-level performance statistics
- PnP and Power Management events (Windows)
- Legacy, MSI, MSI-X interrupts

The Expresso DMA Driver creates and manages descriptor chains in system memory. The Expresso DMA Core then fetches and executes these descriptor chains. This approach enables the descriptor chain size to be maximized while minimizing the need for large descriptor memories in the Expresso DMA Core.

Windows and Linux versions of the Expresso DMA Driver are available. These drivers have been designed for maximum API compatibility to simplify application porting between Windows and Linux.

The Expresso DMA Driver is also provided with a very useful Command Line Interface (CLI) test application. This application can be used to write and read large amounts of data, collect performance data, etc.

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:
- Driver Source Code (C)
- Developer’s Guide
- Expert Technical Support & Maintenance Updates