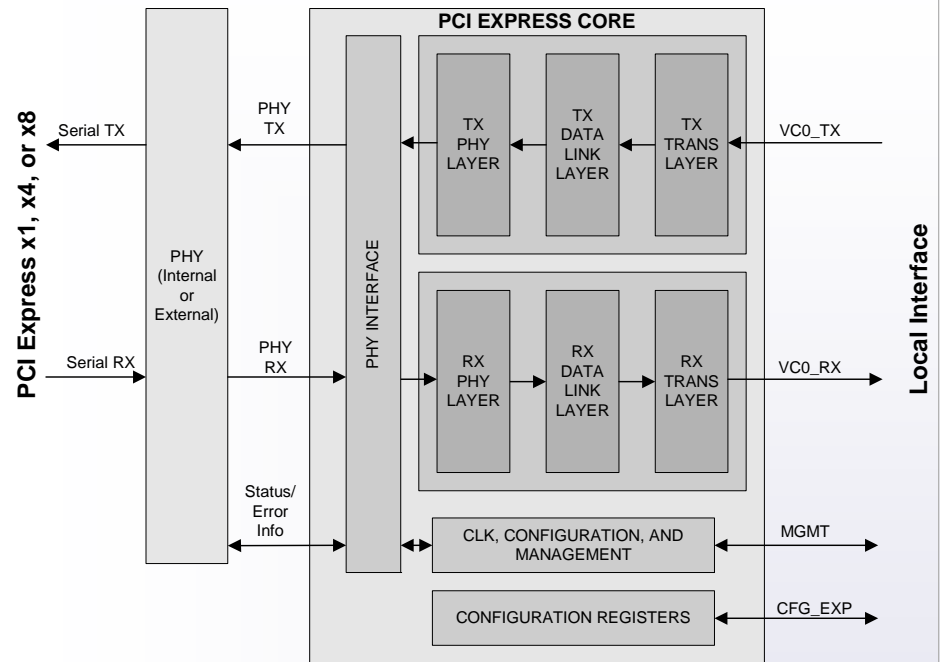


Product Highlights

- High-performance, easy-to-use core
- x1, x4, x8 lane versions available
- Comprehensive PCI Express PHY support including integrated PHY FPGAs, discrete PHY chips and PIPE-compliant ASIC PHYs
- Flexible data buffer sizing
- Complete error-handling support
- Comprehensive status port accelerates design bring-up and validation
- Achieves push-button timing with minimal routing constraints in low-speed grade FPGAs
- Provided with a comprehensive Verification Suite
- Source code available
- Customization and Integration services available
- Implements all 3 PCI Express Layers (Physical, Data Link, Transaction)
- PCI Express™ Base Specification Revision 1.1 compliant
- Fully validated including PCI-SIG, nSys NVS, Catalyst SpekChek, and Lecroy CTS certification

Block Diagram



Product Overview

The PCI Express core has been specifically designed for ease-of-use including:

- Hides the complexities and timing issues of the PCI Express bus from the user
- Built-in receive packet decoding simplifies user packet processing
- Flexible data buffer sizing enables memory usage to be optimized for each application
- Messages automatically processed and provided to user
- Supports user expansion of Configuration Space
- Complete error-handling support including error detection and automatic generation of error messages
- Comprehensive status port provides detailed access to internal core states and traffic accelerating design bring-up and validation
- Achieves push-button timing with minimal routing constraints in low-speed grade FPGAs

A broad range of PCI Express PHYs are supported including the integrated PHY FPGAs, discrete PHY chips (Genesys Logic x4 & x1, Philips x1, TI x1) and PIPE-compliant ASIC PHYs.

The core is provided with the PCI Express Verification Suite which emulates a Root Complex device enabling end-to-end simulation of a PCI Express design prior to use in hardware.

Also available from Northwest Logic are PCI Express Development Boards which can be used to quickly prototype a complete PCI Express system. The PCI Express Reference Design, Driver and GUI are provided with the board in binary.

Northwest Logic also provides customization and integration services to produce complete logic designs.

Product Deliverables:

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