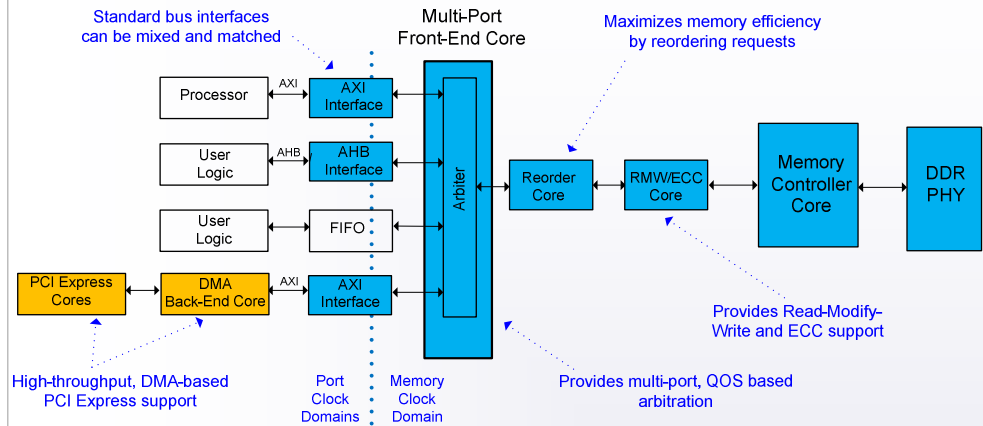


Product Highlights

- Provides high performance interface to standard buses such as AXI, AHB, PLB and Avalon
- Handles conversion of bus width/speed to memory width/speed
- Can be used in single port or multi port configurations
- Provided with a Bus Functional Model (testbench)
- Achieves high clock rates with minimal routing constraints
- Minimal ASIC gate count
- Broad range of ASIC and FPGA platforms supported
- Source code available
- Customization and Integration services available

Block Diagram



Product Overview

Northwest Logic's family of Bus Interface Cores are designed for use in applications requiring an interface to a standard bus such as ARM's Advanced eXtensible Interface (AXI), ARM's Advanced High-performance Bus (AHB), IBM's Processor Local Bus (PLB) and Altera's Avalon bus.

Each core accepts write and read requests from a Bus Master. After receiving a write request the core immediately accepts the associated write data enabling the Bus Master to proceed to the next request. The core then arranges for the data to be written into the memory. After receiving a read request, the core arranges for the data to be read from the memory and then provides it to the Bus Master.

The core handles the conversion of the bus width/speed to the memory width/speed. This enables the bus width and speed to be completely independent of the memory width and speed.

The core can be used in a single port configuration connected directly to the Memory Controller Core. Multiple instances of the core can be used with Northwest Logic's Multi-Port Front-End Core. This enables a multi-port design with a mix of different types of bus interfaces to be quickly and easily created.

Northwest Logic also provides the Bus Interface Core with a testbench which serves as a Bus Functional Model of the target standard bus.

The AXI and AHB Interface Cores requires the Read-Modify-Write Core which is licensed separately.

The PLB Interface Core requires the Multi-Burst Core which is included with the PLB Interface Core.

Northwest Logic also provides a complete set of quick-turn design services including IP Customization and Logic, Board, Software Development services. Contact Northwest Logic for a quote.

Product Deliverables:

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