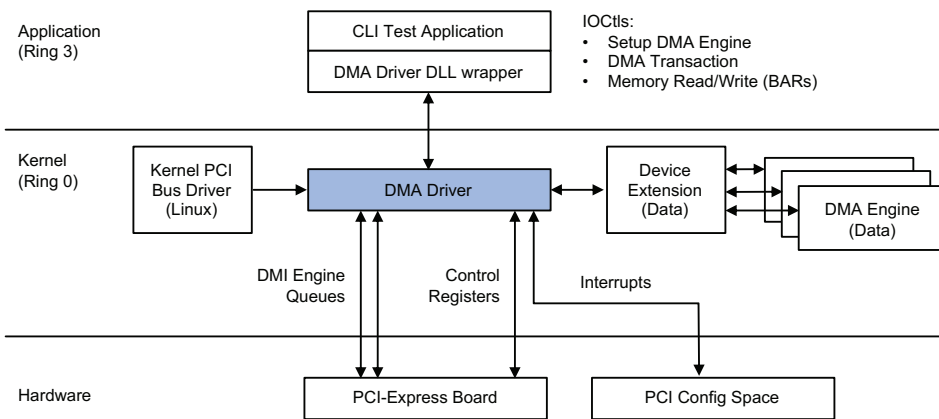


DMA Back-End Driver

The Northwest Logic DMA Back-End Driver is designed to be used with the Northwest Logic AXI DMA Back-End core. It supports all DMA modes supported by the core including Packet/Block and Addressed/Non-Addressed transfers.

DMA Back-End Driver Environment



Highlights

- Works with Northwest Logic AXI DMA Back-End core to provide high-performance, scatter-gather DMA operation
- Fully supports overlapped DMA operation
- Windows and Linux versions use common API
- Supports Packet/Block and Addressed/Non-addressed transfers
- Supports 32 and 64-bit system addressing
- Supports legacy, MSI, MSI-X interrupts
- Performs parameter checking
- Can be quickly customized to create an application-specific driver
- Includes Command Line Interface (CLI) test application

Overview

The Northwest Logic DMA Back-End Driver is designed to be used with the Northwest Logic DMA Back-End core and AXI DMA Back-End core. It supports all DMA modes supported by the core including Packet/Block and Addressed/Non-Addressed transfers. Together the driver and core provide a complete, pre-packaged, flexible DMA system.

The DMA Back-End Driver includes support for a) device registers and memory reads and writes, b) DMA read and write transfers, c) low-level performance statistics, d) PnP and Power Management events (Windows), and e) legacy, MSI and MSI-X interrupts.

The DMA Back-End Driver creates and manages descriptor chains in system memory. The 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 DMA core.

Companion Windows and Linux Expresso DMA drivers are available. API compatibility simplifies application porting.

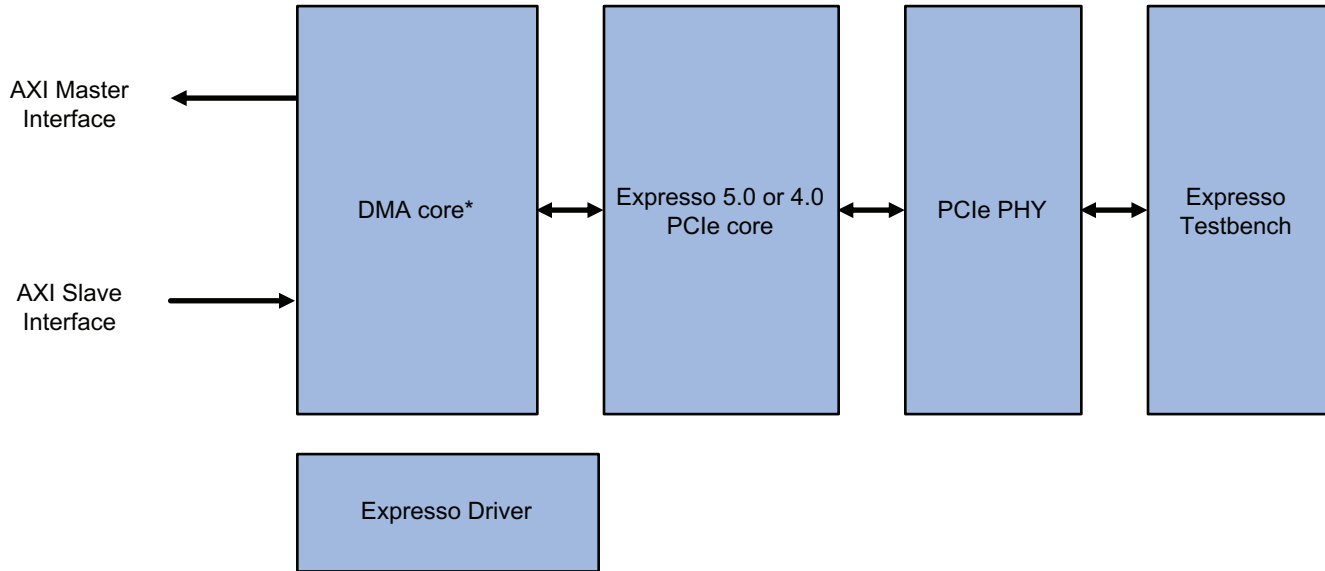
IP Core customization services are also available.

Deliverables

- Driver source code (C)
- Developer's guide
- Expert technical support
- Maintenance updates



PCI Express Solution



*Options include the Expresso DMA Bridge core, DMA Back-End core or AXI DMA Back-End core

PCI Express Platform

Rambus, joined by the team at Northwest Logic, offers a complete solution for PCIe applications.

Features

- Works with Northwest Logic DMA Back-End core and AXI DMA Back-end core to provide high-performance, scatter-gather DMA operation
- Fully supports overlapped DMA operation
- Windows and Linux versions use common API
- Supports Packet/Block and Addressed/Non-addressed transfers
- Supports 32 and 64-bit system addressing
- Supports legacy, MSI, and MSI-X interrupts
- Performs parameter checking
- Can be quickly customized to create an application-specific driver
- Includes CLI test application
- Delivered as source code
- Customization and integration services available

rambus.com/controllers

