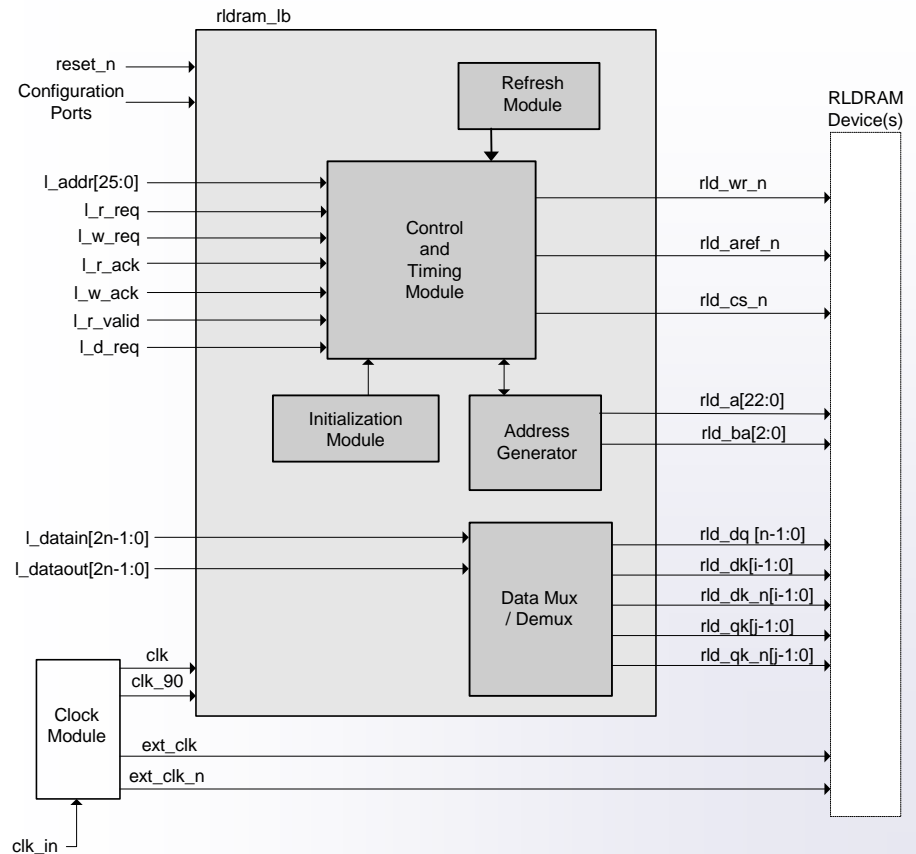


Product Highlights

- High memory throughput achieved via command queuing
- Multi-Port Front-End supports high efficiency command reordering and multi-port interface
- ECC, RMW, and Multi-Burst add-on modules available
- Achieves high clock rates with minimal routing constraints
- Supports all standard RLDRAM II chips
- Run-time configurable timing parameters and memory settings
- A variety of read capture options are supported
- Automatic generation of initialization and refresh sequences
- Supports self-refresh and power-down modes
- Source code available
- Customization and Integration services available

Block Diagram



Product Overview

Northwest Logic's Reduced Latency DRAM (RLDRAM) II Controller Core is designed for use in applications requiring high memory throughput, high clock rates and full programmability.

The core has been optimized to take advantage of the fast random cycle and fast access times available with RLDRAM II. The core also supports both common and separate data buses and multiplexed and non-multiplexed addressing.

The core accepts commands using a simple local interface and translates them to the command sequences required by RLDRAM II devices. The core also performs all initialization and refresh functions.

The core queues up multiple commands in the command queue. This enables optimal bandwidth utilization for both short transfers to highly random address locations as well as longer transfers to contiguous address space.

The core is provided with run-time programmable inputs for all memory timing parameters and configuration settings. This ensures compatibility with all RLDRAM II configurations.

Four optional add-on modules are available:

- Multi-Port Front-End
- Error Correction Coding (ECC) Module
- Read-Modify-Write (RMW) Module
- Multi-Burst Module

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