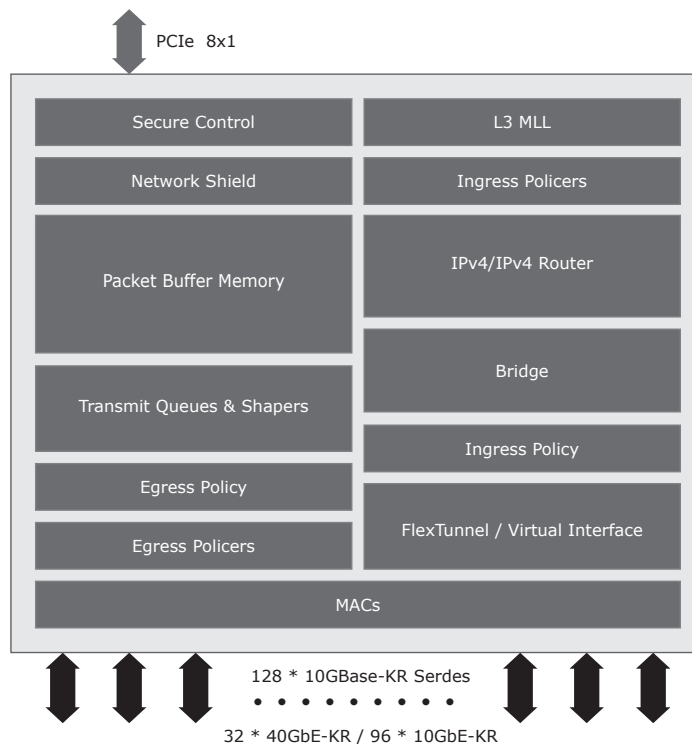MARVELL™

# Marvell® Prestera® 98CX8297

Next Generation Switch Fabric for Modular Platforms

## ▶ PRODUCT OVERVIEW

The Marvell® Prestera® CX family of packet processors enable high density 10GbE/40GbE solutions Datacenter Top of Rack (ToR), and Aggregation switches as well as Ethernet aggregation platforms for the Campus and Service Provider markets. The Prestera 98CX8297 provides line rate performance for up to 32 ports of 40 GbE or 96 ports of 10GbE with a full complement of Layer2/Layer3 switching, IPv4/v6 Unicast and Multicast routing capabilities along advanced classification and congesting management features.

## ▶ BLOCK DIAGRAM



PCIe 8x1

| | |
|---|---|
| Secure Control | L3 MLL |
| Network Shield | Ingress Policers |
| Packet Buffer Memory | IPv4/IPv4 Router |
| | Bridge |
| Transmit Queues & Shapers | Ingress Policy |
| Egress Policy | FlexTunnel / Virtual Interface |
| Egress Policers | |
| MACs | |

128 * 10GBase-KR Serdes

32 * 40GbE-KR / 96 * 10GbE-KR

## ▶ KEY FEATURES AND BENEFITS

| SPECIAL FEATURES | BENEFITS |
|---|---|
| • Integrated 10GBase-KR PHYs | • Drive backplanes for modular platforms in ATCA, blade server applications |
| • Datacenter Bridging | • Prioritization and Congestion management capabilities for next generation datacenter solution<br>  – Priority Flow Control, Congestion Notification enable lossless mode of operation as well as burst isolation |
| • Policy and classification engine | • Built-in intelligence for application-level control |
| • CarrierSpan™ | • Full complement of Metro Ethernet standards along with the latest service delivery techniques viz L2/L3 VPN, Q-in-Q, TR-101 etc<br>  – Enables business and consumer networking services |

## ▶ APPLICATIONS

The Prestera 98CX8297 is a 1.2Tbps packet processor device that enables performance and cost optimized solutions for a broad range of platforms in the Datacenter, Campus and Service provider environments. In addition, it has a full complement of L2/L3/L4 forwarding capabilities along with an advanced classification and policy engine. The Prestera CX devices are OpenFlow1.0 compliant and support additional extensions for a hybrid system design.

To shorten system manufacturers design cycles and accelerate time-to-market, Marvell provides complete development platforms and reference designs with, schematics, layout files and related documentation.



Marvell Prestera 98CX8297: 32 port QSFP Reference Design

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