

# Marvell Presteria 98CX8129

High-density 40GbE/10GbE Packet Processor  
for Carrier and Enterprise Applications

## PRODUCT OVERVIEW

The Marvell® Presteria® CX family of packet processors enable high-density 40GbE/10GbE solutions for Ethernet platforms in the classical carrier, enterprise and datacenter applications as well as next generation software-defined networks. The Presteria 98CX8129 provides line rate performance for up to 16 ports of 40 GbE or 48 ports of 10 GbE with a full complement of Layer2/ Layer3 switching, IPv4/v6 unicast and multicast routing capabilities along with advanced classification and congestion management features.

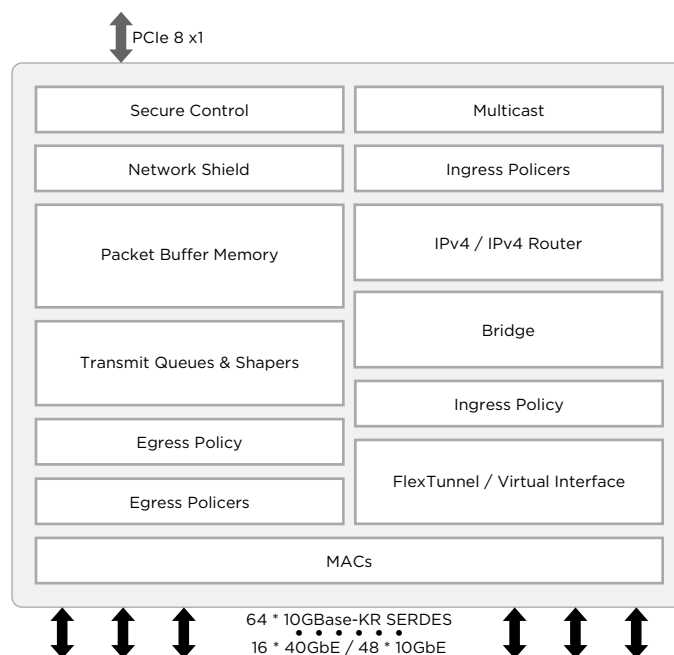


Fig 1. 98CX8129 System Block Diagram

SPECIAL FEATURES	BENEFITS
<ul style="list-style-type: none"> <li>Integrated 10G PHYs</li> </ul>	<ul style="list-style-type: none"> <li>Drive backplanes for modular platforms</li> <li>Native support for SFI and XFI connectivity to Tranceivers</li> </ul>
<ul style="list-style-type: none"> <li>CarrierSpan®</li> </ul>	<ul style="list-style-type: none"> <li>Full complement of metro Ethernet standards along with the latest service delivery techniques like viz L2/L3 VPN, Q-in-Q, TR-101, etc.</li> <li>- Enables business and consumer networking services</li> </ul>
<ul style="list-style-type: none"> <li>Datacenter Bridging</li> </ul>	<ul style="list-style-type: none"> <li>Prioritization and congestion management capabilities for next-generation datacenter solution</li> <li>- Priority flow control and congestion notification enable lossless mode of operation as well as burst isolation</li> </ul>
<ul style="list-style-type: none"> <li>Policy and Classification Engine</li> </ul>	<ul style="list-style-type: none"> <li>Built-in intelligence for granular flow level control</li> </ul>

## APPLICATIONS

The Prestera 98CX8129 is a 640Gbps packet processor that enables performance- and cost-optimized solutions for a broad range of platforms in the campus, service provider and datacenter 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 ideal for software defined networking (SDN), leveraging OpenFlow 1.3.1 with support for additional extensions in a virtualized or 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.



Fig 2. Reference Design

**THE MARVELL ADVANTAGE:** Marvell chipsets come with complete reference designs which include board layout designs, software, manufacturing diagnostic tools, documentation and other items to assist customers with product evaluation and production. Marvell's worldwide field application engineers collaborate closely with end customers to develop and deliver new leading-edge products for quick time-to-market. Marvell utilizes world-leading semiconductor foundry and packaging services to reliably deliver high-volume and low-cost total solutions.

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Marvell Semiconductor, Inc.

5488 Marvell Lane  
Santa Clara, CA 95054  
Phone 408.222.2500  
[www.marvell.com](http://www.marvell.com)

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