



# MARVELL® PRESTERA® 98CX84xx

25/100GbE Optimized Top of Rack Switch for Data Center, Private Cloud, and Enterprise Network Applications

## PRODUCT OVERVIEW

The Marvell® Prestera® 98CX84xx family is a new generation of highly-integrated packet processors enabling single and multi-chip solutions for public and private data center networks. Ideally suited for data center transitions from 10/40GbE towards 25/50/100GbE port speeds, the 98CX84xx family supports advanced data center features, such as virtual overlay networking with programmable tunnel header encapsulation, NFV service function chaining, low latency cut-through switching, and advanced congestion mechanisms. The 98CX84xx family supports OpenSwitch switch driver plugin and OCP's switch abstraction interface (SAI) software stack on top of Prestera software drivers.

The family has sophisticated QoS features to optimize QoS between data center cloud applications, such as metering, counting, scheduling, and shaping. It also supports advanced traffic monitoring features such as sFlow, IPFIX, and remote port analyzing. The hardware OAM engines auto-generate and receive OAM traffic to monitor cloud end-to-end service connectivity and provide high accuracy delay and packet loss measurement.

To facilitate efficient network self-healing and troubleshooting, these processors possess extensive traffic counters across all processing and forwarding/filtering engines. They also support the Marvell extended-bridging (eBridge) architecture, a unified architecture implementing a hardware-based virtualization of interfaces and switching domains. This architecture enables the key data center technologies, such as the standard virtual overlay encapsulations (for example, VXLAN, NVGRE).

## KEY FEATURES AND BENEFITS

FEATURES	BENEFITS
Port configuration	<ul style="list-style-type: none"><li>• 48 ports of 25GbE and 6 ports of 100GbE uplinks for 25GbE</li><li>• 18 ports of 100GbE</li></ul>
Analytics	<ul style="list-style-type: none"><li>• Marvell's unique time-stamp analytic which supports Packet Conservation Algorithm for Internet (IPCA)</li></ul>
Virtualization	<ul style="list-style-type: none"><li>• Enhanced QoS and virtual output queues (VOQ) support</li><li>• eBridge Architecture</li></ul>
Virtual overlay	<ul style="list-style-type: none"><li>• NVGRE, VXLAN-GPE, Network Services Header (NSH), Geneve, Shortest Path Bridging (SPB), GRE</li></ul>
Server virtualization	<ul style="list-style-type: none"><li>• IEEE 802.1Qbg EVB and 802.1BR Port Extender</li></ul>
Host interface	<ul style="list-style-type: none"><li>• PCIe</li></ul>

**BLOCK DIAGRAM**

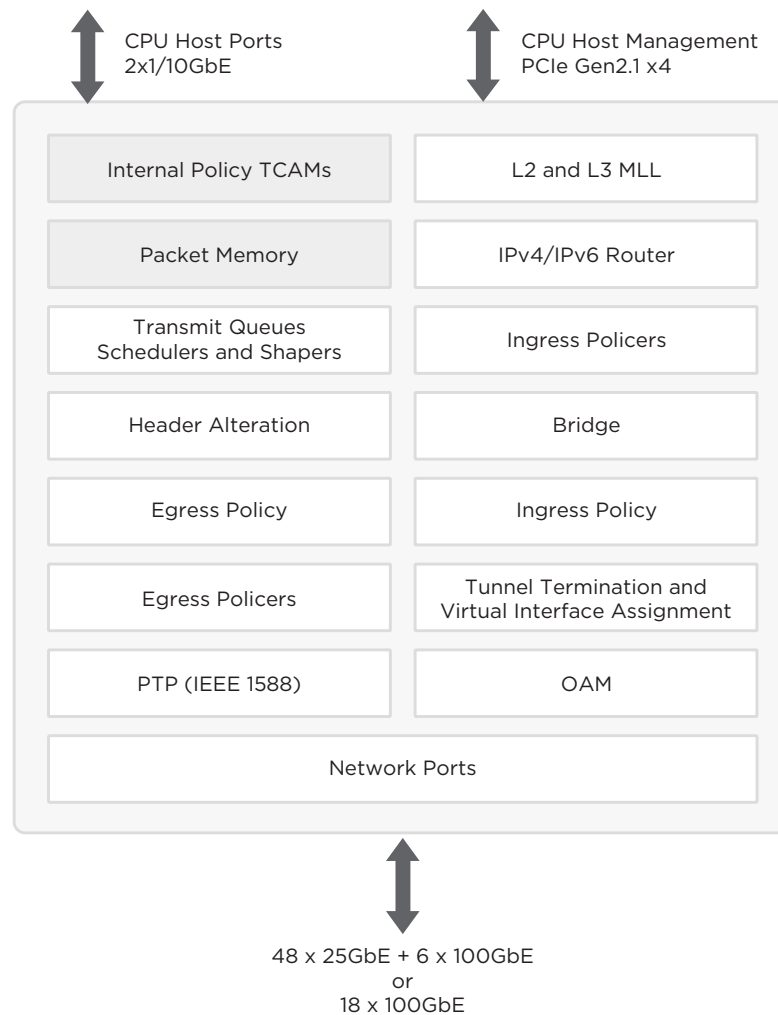


Figure 1: Marvell Prestera 98CX84xx Switch

**TARGET APPLICATIONS**

- ToR and Blade Switch, for 1GbE and 25GbE servers
- Data center Chassis Spine
- Port Extender (Control bridge and port extender)
- Enterprise Chassis supporting multiple line cards



**ABOUT MARVELL:** Marvell (NASDAQ: MRVL) is a global leader in providing complete silicon solutions. From storage to cloud infrastructure, Internet of Things (IoT), connectivity and multimedia, Marvell's diverse product portfolio aligns complete platform designs with industry-leading performance, security, reliability and efficiency. For additional information, including Marvell's sales offices and representatives, please visit our website at [www.marvell.com](http://www.marvell.com).