



SCALABLE SWITCHING—24-GBPS ETHERNET SWITCH PACKET PROCESSOR

FEATURES

- **Deterministic, programmable architecture**
 - Wirespeed performance
 - BroadSide line-rate processor
 - Coprocessors accelerate common functions
- **Advanced network forwarding**
 - IEEE 802.1ad Provider Bridging (Q-in-Q)
 - IEEE 802.1ah Provider Backbone Bridging (MAC-in-MAC)
 - IPv4 and IPv6 unicast and multicast routing
 - MPLS and VPLS forwarding
 - Tunneling
- **Scalable forwarding**
 - Off-chip tables, meters, and counters
 - Distributed ingress and egress processing
 - Logical interfaces
- **Robust embedded network monitoring and protection**
 - IEEE, ITU, and IETF Ethernet and MPLS OAM
 - Protection switches for 50-ms service recovery
 - Port and flow mirroring
 - Fine-grained, 64-bit traffic counters
- **Security and QoS policy enforcement**
 - Integrated RangeFinder classification engine enforces wirespeed ACLs
 - IETF and metro Ethernet forum policers
 - BroadSAFE™ DoS filters

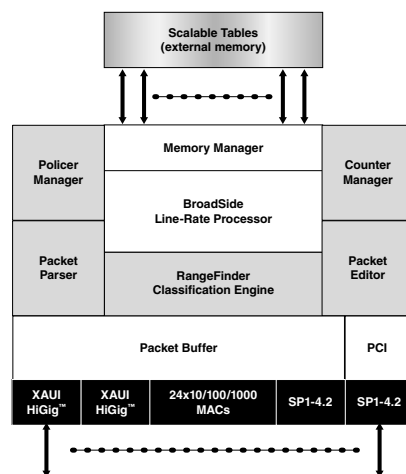
FEATURES (CONT.)

- **Versatile, backplane-capable standard interfaces**
 - Two integrated 10-GbE MACs with HiGig+™ support
 - 24 integrated 10/100/1000M MACs
 - Multichannel SPI-4.2 interfaces
- **Flexible on-chip, shared memory packet buffer**
 - Jumbo frames
 - Any-to-any connectivity
 - Lossless backpressure or priority tail drop
 - Processor bypass

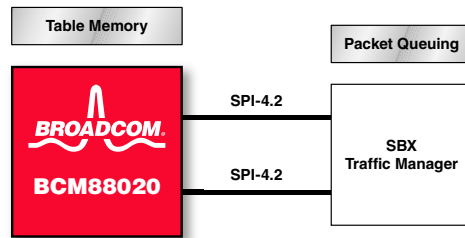
SUMMARY OF BENEFITS

- **Exceptional network scalability**
- **Programmable architecture adapts to changing network requirements**
- **Complete application solution minimizes time-to-market and decreases risk**
- **Unique processor architecture runs concurrent services at wirespeed**
- **Fast path OAM scales service monitoring**
- **Integrated ACLs eliminate cost and power of external network search engines or TCAMs**

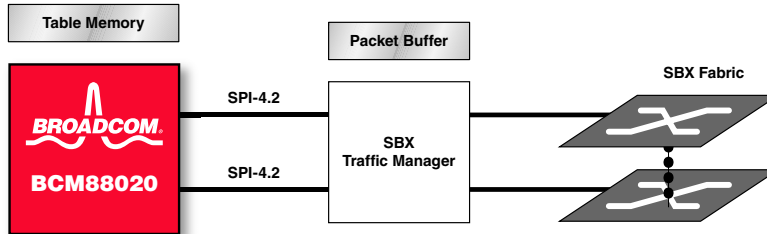
Scalable Packet Processing



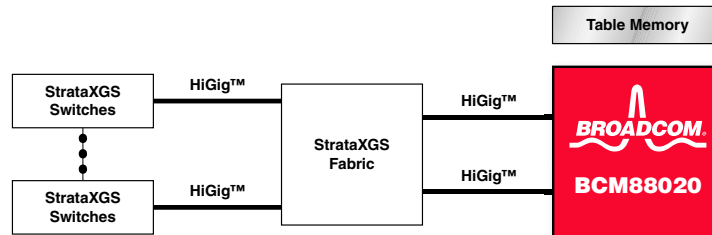
OVERVIEW



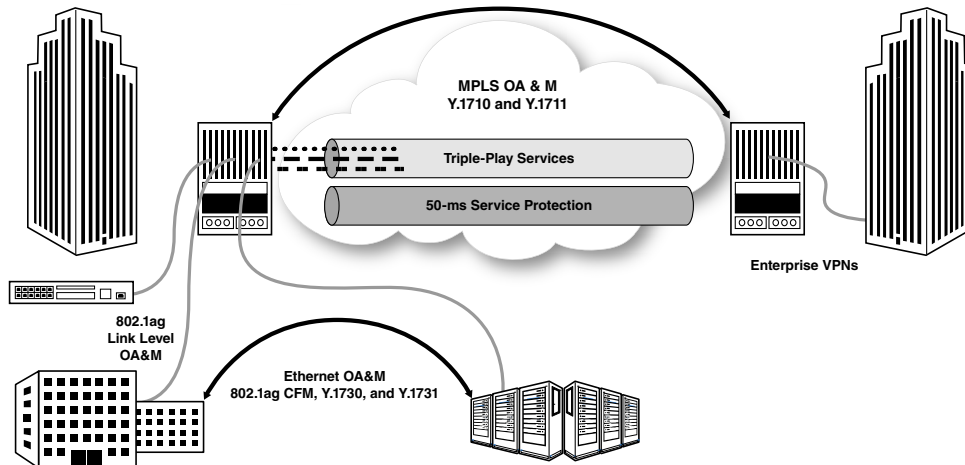
Highly Integrated Fixed Configuration Carrier Ethernet System



SBX Fabric Scales Architecture to Modular Chassis Systems



Expand StrataXGS® Systems with High-Value, Scalable Services



Build Converged Ethernet Networks with BCM88020-Powered Systems

Broadcom®, the pulse logo, Connecting everything®, BroadSAFE™, HiGig™, HiGig+™, and StrataXGS® are trademarks of Broadcom Corporation and/or its subsidiaries in the United States and certain other countries. All other trademarks mentioned are the property of their respective owners.

Connecting
everything®



BROADCOM CORPORATION

5300 California Avenue
Irvine, California 92617

© 2007 by BROADCOM CORPORATION. All rights reserved.

88020-PB00-R 04/13/07

Phone: 949-926-5000

Fax: 949-926-5203

E-mail: info@broadcom.com

Web: www.broadcom.com