

## INTEGRATED SWITCH AND TRAFFIC MANAGER

### FEATURES

- **Bandwidth**
  - Supports 20 Gbps traffic line-rate hierarchical per subscriber traffic management
  - Line-rate for all packet sizes
- **Integrated Packet Processor**
  - Egress header translation, statistics, and lookups supporting IPv4, IPv6, bridging, and MPLS
- **Traffic Manager**
  - Per-flow queuing
  - Deep buffers—using external DDR DRAM
  - Hierarchical scheduling
  - WFQ, SP, BE
  - Traffic shaping
  - Bandwidth guarantees
  - Logical + spatial multicast
  - Admission control—WRED
  - Statistics—packet and byte counters
  - Port and flow mirroring
  - Remote monitor interface
- **Standards-Compliant Interfaces**
  - 2 x SPI-4.2 (OIF) highly channelized
  - PCI—Host control + packet access
- **Package and Power**
  - 1517-pin FC-BGA
  - 10W

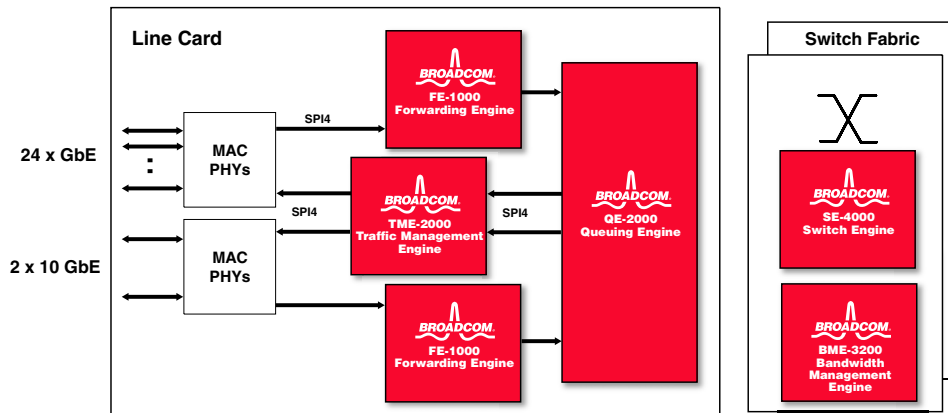
### SUMMARY OF BENEFITS

- Optimized for the Metro-Ethernet and packet aggregation markets
- Low-cost DDRII-DRAM for deep buffering
- Complete solution—Offered stand alone or coupled with Forwarding Engines (FEs) and software
- Standard interfaces (SPI-4.2 and PCI) for easy system integration
- Multicast optimized for video broadcast
- Designed to meet stringent Triple Play requirements
- Per-flow queuing for QoS isolation and SLAs
- Complete system library—APIs available for fast time-to-market
- API compatible with Sandburst® Switch Fabric and Forwarding Engines

### APPLICATIONS

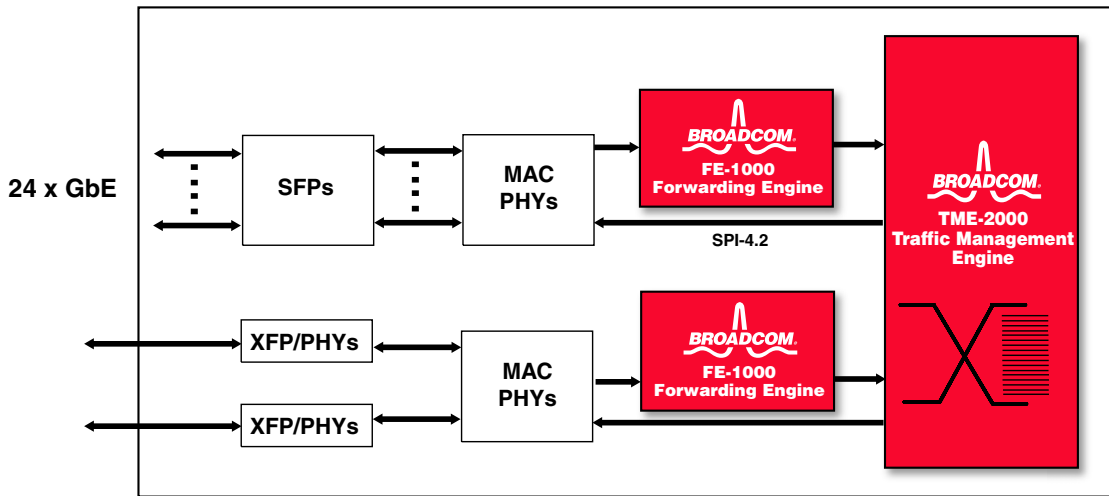
- Metro-Ethernet switches and routers
- Enterprise chassis platforms
- IP DSLAM/GE PON/VPNs

### 20-Gbps Traffic Manager on Line Card



In this line card application, the TME-2000 provides the system egress traffic management with per-flow QoS and deep buffering in DRAM. The chipset provides a complete solution with up to 1.2 Tbps of switching. The FE-1000 provides programmable line rate packet forwarding.

## OVERVIEW



The TME-2000, along with the FE-1000, provides a complete Metro solution with deliverable L2/L3/L4 microcode and APIs. The QE-2000 provides the switching, traffic management, and egress packet processing.

### Metro Stand Alone Solutions with FE-1000

The TME-2000 is a pure flow Traffic Manager optimized for a wide range of Metro applications. It supports up to 20 Gbps of switching with hierarchical per-flow traffic management. Its traffic management and performance is optimized for the Metro-Ethernet and high density packet aggregation markets.

The TME-2000 is designed to operate in stand alone platforms for Metro Access and Edge applications, or in modular chassis platforms on a line card as a 20-Gbps traffic manager.

The TME-2000 is ideal for implementing advanced traffic management features required in the Core, Metro, and Enterprise networks to implement Quality of Service (QoS)-based Service Level Agreements (SLAs). It offers fully integrated advance queuing, congestion avoidance, statistics, hierarchical shaping, and scheduling functions.

The TME-2000 is also offered as part of a complete system solution with the FE-1000 Forwarding Engine and deliverable L2/L3/L4 microcode.

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