

PaceMaker 2.4™

OC-48 Traffic Management Engine

Product Brief

Traffic Management Family

Features:

Overview

- OC-48c throughput
- Manages 256K output queues
- 1M buffer shared memory

Traffic Manager

- Dual leaky bucket shaper
- Per-session output queuing for up to 256K sessions
- EDF scheduler provides guaranteed delay and rate services
- Early packet discard/Partial packet discard
- GFR service for cell/frame/packet traffic

AAL5 SAR

- OC-48 AAL5 SAR supporting 256K sessions

FRF-5 Interworking

- FRF-5 compliant ATM/Frame Relay network interworking

Policing

- ATM Dual leaky bucket policer
- Frame Relay/Packet policer

Statistics

- Per port and per session statistics collection
- Statistics collection for billing and monitoring

A New Level of Feature Integration and Performance

The PaceMaker 2.4™ is a highly integrated cell and packet processing engine which integrates a number of common functions found inside today's high speed networking equipment.

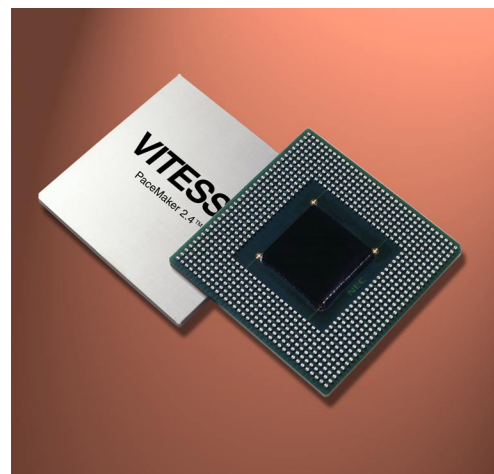
The PaceMaker 2.4, with its state of the art Quality of Service (QoS) features, supports full OC-48 data rate while providing packet and cell classification, policing, wire speed AAL5 SAR, ATM/Frame Relay network interworking, a dual leaky bucket shaper, and an optimum "Earliest Deadline First" (EDF) scheduler which provides new capabilities in traffic congestion management. The PaceMaker 2.4 also supports an unrestricted number of multicast leaves, VC merging, and label swapping.

New Internet Infrastructure Demands New Solutions

Driven by the demand for enhanced services for the Internet infrastructure, PaceMaker 2.4 was developed to provide new QoS and Class of Service (CoS) capabilities to systems that make up the Internet infrastructure. Based upon leading academic research into congestion management theory and traffic modeling, PaceMaker 2.4 is the first device to address the immediate problem of QoS for Internet users.

World's First EDF Implementation

The PaceMaker 2.4 is the world's first and only device to implement the theoretically proven optimal algorithm for Earliest Deadline First (EDF) traffic



management. Originally developed in the 1960's for supercomputer processor instruction scheduling, EDF applies delay and rate attributes to individual traffic connections (up to 256,000 in PaceMaker 2.4) thereby enabling new system architectures to be deployed with industry leading features and benefits for the next generation Internet infrastructure.

By provisioning for both rate and delay guarantees for packet and cell traffic types, PaceMaker 2.4 can be used to enable QoS for next generation voice, video and data aggregation and switching equipment.

Complete Interworking Capabilities

PaceMaker 2.4 provides complete packet and cell interworking capabilities for multiservice applications:

- Frame Relay/ATM interworking
- AAL5 SAR
- Unified Packet and Cell buffer and traffic management architecture for integrated voice, video and data

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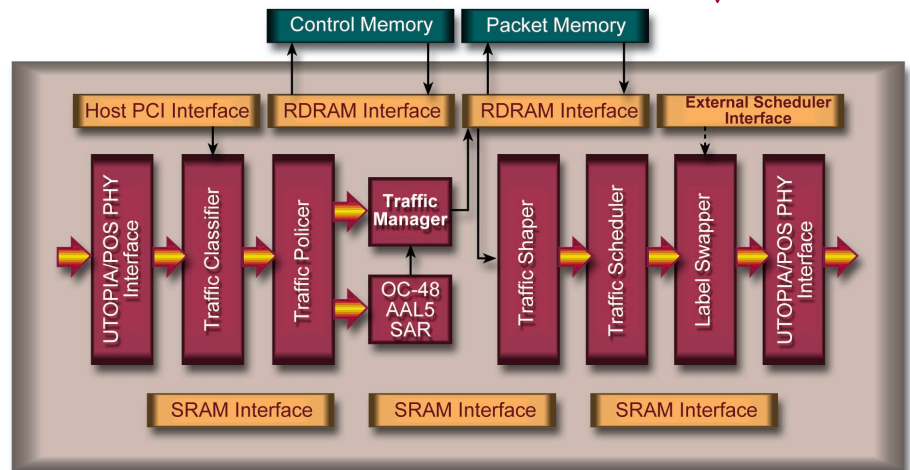
Benefits:

- Time to market advantage
- Single-chip, low power, cost-effective solution
- Comprehensive OC-48 traffic and congestion management solution
- Unmatched QoS and CoS capabilities and services

Applications:

Complete solutions for a wide variety of core networking equipment, including:

- Terabit Routers
- Multiservice Add/Drop Multiplexers
- Digital Cross Connects
- ATM Core Switches
- DSLAMs



Specifications:

Environmental

- 2.5V core, 3.3V I/O
- 5W (preliminary)
- 756-pin ABGA
- 0° - 70° Celsius operating temp.

Traffic Management Family of Products

Vitesse's Traffic Management family of products is targeted at the packet processing problems found within core switches and high-speed routers at the heart of the Internet. The products deal with the policing, management, quality provisioning and switching of layer 2, 3, and 4 data packets at speeds of 2.4 Gbps and beyond.

Complete System Solutions, From PHYs to Fabrics

Vitesse is dedicated to providing complete system solutions for our customers. Vitesse offers the end-to-end IC solution for high-speed telecommunication and networking applications for the core, metro, and aggregation markets. This complete system solution consists of a family of products, including PHYs, network processors, traffic managers, and fabrics, for varying service and line speed requirements.

For more information on Vitesse Products visit the Vitesse web site at www.vitesse.com or contact Vitesse Sales at (800) VITESSE or sales@vitesse.com