

VSC9135 VSC9138

VITESSE

VSC9138 (LOVCAT192) 10 Gbps Multi-service High Order/Low Order Virtual Concatenation Mapper
 VSC9135 (LOVCAT48) 2.5 Gbps Multi-service High Order/Low Order Virtual Concatenation Mapper



APPLICATIONS:

- ▶ SONET/SDH Multi-service Provisioning Platforms (MSPPs)
- ▶ Next Generation SONET/SDH Metro Ethernet Systems
- ▶ Resilient Package Ring (RPR) Applications

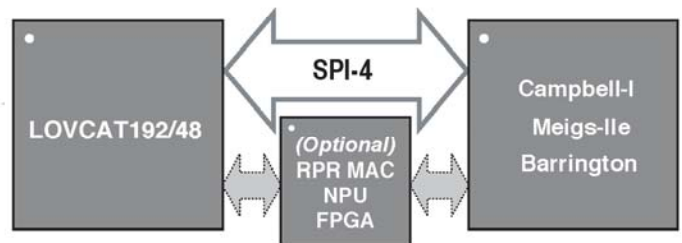
FEATURES:

- ▶ 10 G or 2.5 G Bandwidth Support
- ▶ 128 Independent Channels (GFP, HDLC)
- ▶ Hitless Link Capacity Adjustment Scheme (LCAS)
- ▶ Virtual Concatenation (VC) and Contiguous Concatenation
- ▶ Support for Generic Framing Protocol (GFP)
- ▶ VC Groups with High-order (HO) Granularity of STS-1/VC-3, STS-3C/VC-4s as Well as Low-order (LO) Granularity of VT1.5/VT2.0, TU-12/TU-11
- ▶ OIF Compliant SPI-3 and SPI-4.2 Interfaces
- ▶ Dual-rate STS-48/STM-16 (TFI-5) or STS-12/STM-4 Working & Protection Backplane Interfaces
- ▶ Pin Compability with Existing HOVCAT Products
- ▶ Software Device Drivers and Diagnostics Included
- ▶ Third Generation VC Mapper Device

BENEFITS:

- ▶ Support for Multiple Linecard Densities with Pin Compatible Devices
- ▶ High VC Group Count Allows Dense Termination of Multiple Network Endpoints in a Single Device
- ▶ Included LCAS Application Code Enables and Standards Compliant Hitless LCAS Implementation
- ▶ Concurrent Support for Legacy Contiguous Concatenation and Virtual Concatenation Within the Same Device
- ▶ Encapsulates Received Data from SPI-3/4.2 Interface with a GFP Header
- ▶ Support for any Combination of High and Low Order Tributaries
- ▶ Supports Connection to both 2.5 G and 10 G NPUs or FPGAs to Provide Next Generation Metro Ethernet Services
- ▶ Direct Connection to Existing SONET/SDH TDM Backplanes at 622 M and 2.5 G Without External Backplane Device
- ▶ Full Suite of Software Drivers and Diagnostics Speeds Development Time
- ▶ Built on Successful HOVCAT Hardware and Software Platform for Easy Design Migration

APPLICATION DIAGRAM:



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VSC9135 (LOVCAT48) 2.5Gb/s Multi-service High Order/Low Order Virtual Concatenation Mapper

GENERAL DESCRIPTION:

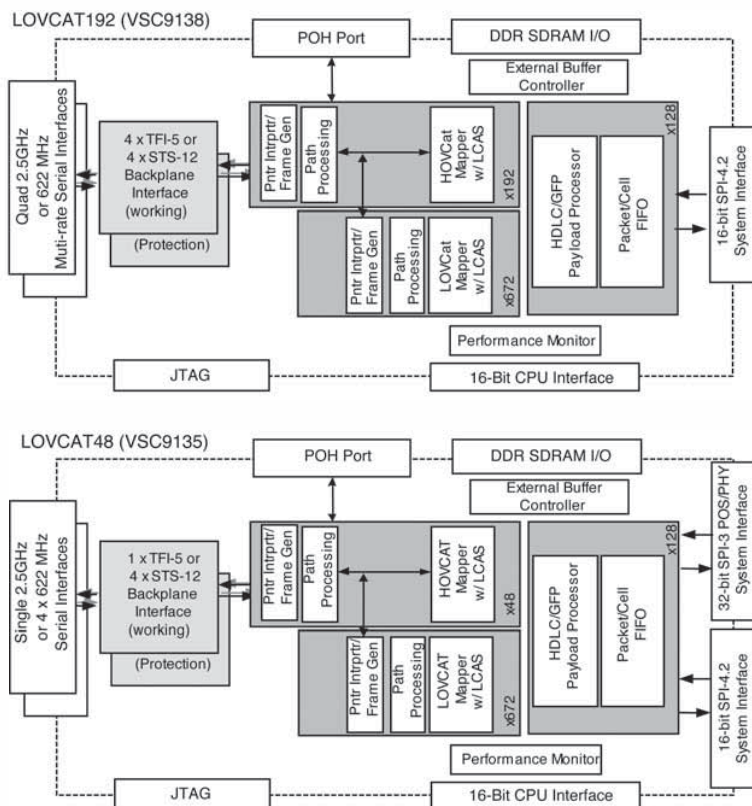


The VersaCAT family adapts Ethernet technology to the WAN by efficiently provisioning Ethernet services across existing transport infrastructures while optimizing bandwidth utilization using hitless rate adaptation. It includes a suite of 2.5G and 10G mappers (HOVCAT, HOVCATe, LOVCAT) and multi-protocol WAN MACs (Meigs-IIe, Campbell-I, and Barrington) that support Virtual Concatenation, fully integrated LCAS and GFP, as well as provides extensive Layer 2 aggregation, encapsulation and management features. More specifically this family is used for efficient provisioning of data services from Ethernet (10Mbps) to 10 Gigabit Ethernet (10Gbps) and various storage and video protocols over WAN transport infrastructure, while optimizing bandwidth utilization using hitless rate adaptation.

SPECIFICATIONS:

- ▶ 128 Virtual Concatenation Groups (VCGs) of STS-1/VC-3, STS-3C/VC-4, VT1.5/VT2.0, and TU-12/TU-11
- ▶ High Order Path Overhead (POH) Ports for External Sourcing or Processing
- ▶ System Packet Interface Level 4, Phase 2, 16-bit (SPI-4.2)
- ▶ System Packet Interface Level 3, 32-bit (SPI-3)
- ▶ 72-bit External DDR SDRAM Interface
- ▶ Dual-rate STS-48/STM-16 (TFI-5) or STS-12/STM-4 working & Protection Backplane Interfaces
- ▶ Power Dissipation: 9W (LOVCAT192) 7W (LOVCAT48)
- ▶ 1760 HFCBGA Package

BLOCK DIAGRAM:



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

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