



CORTINA

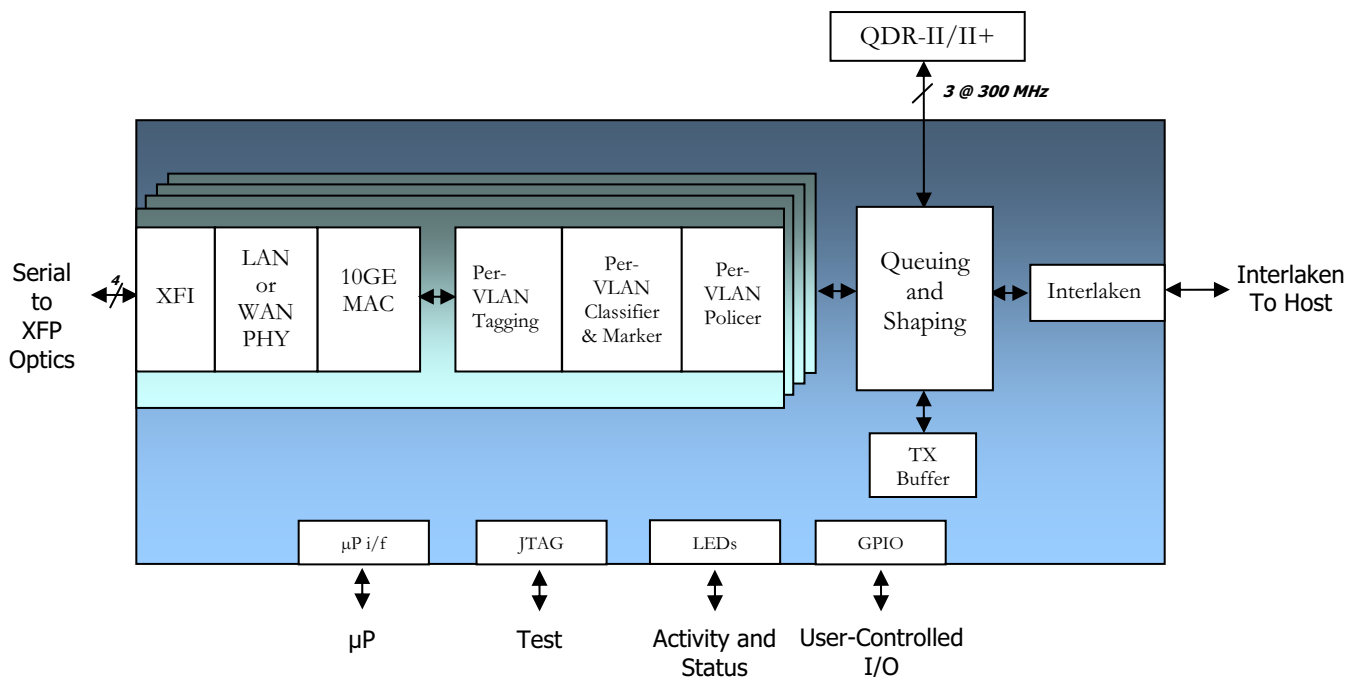
Product Brief

Cortina Systems® CS3487 4-port 10G Oversubscription Ethernet Aggregator

Overview

The Cortina Systems® CS3487 4-port 10 Gigabit Oversubscription Ethernet Aggregator (CS3487 Ethernet Aggregator) is a 4-port 10 Gigabit oversubscription Ethernet Aggregator for high-density switches and transport platforms. It provides industry-leading 10 GE integration, with four on-board XFI SerDes for direct connection to XFP optical modules. With advanced classification through Layer 4, four queues per port, efficient QDR-II/II+ oversubscription buffers, WRED, and strict priority and round robin

scheduling options, CS3487 Ethernet Aggregator delivers the strongest oversubscription feature set in the industry. It also supports per-VLAN policing, statistics, tagging, and classification to assist the delivery of MEF-compliant Carrier Ethernet services. On the host side, Cortina Systems, Inc.'s (Cortina™) open Interlaken protocol achieves 25 Gbps of bandwidth across 2-8 SerDes lanes for the industry's most cost effective high-performance interconnect.



CS3487 Ethernet Aggregator Block Diagram

Features

Functionality:

- 4 x 10 Gigabit Ethernet MACs
- LAN or WAN PHY on any port
- 4 x XFI SerDes
- 1 x 24 Gbps Interlaken to host
- Guaranteed and shaped max BW per-priority
- Rule-based classification engine and frame parser through Layer 4, including support for IPv6
- MEF-compliant per-VLAN policing, statistics, classification, and tagging
- .1p and DSCP marking and marking down of yellow frames
- Four queues per port
- RFC2698 policing to committed and peak information rate
- Optional QDR-II/II+ memories (3 devices @ 300 MHz) for oversubscription
- WRED or priority drop thresholds for congestion management
- Any combination of strict priority or packet-weighted round robin priority scheduling to host
- Standard Ethernet MIBs and RMON (RFCs 2665, 2819)

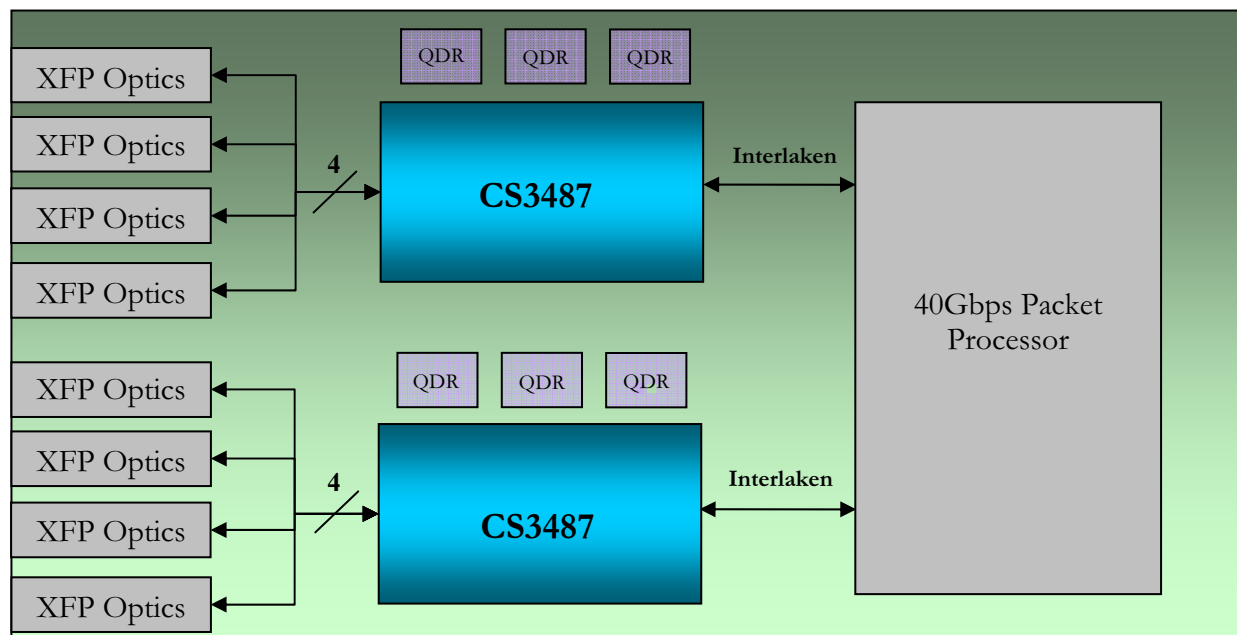
Interfaces:

- Interlaken to host: 2-8 lanes, with SerDes rate from 3.125 – 6.25 Gbps
- Intel*/Motorola*-style Microprocessor bus
- GPIO for LEDs
- JTAG

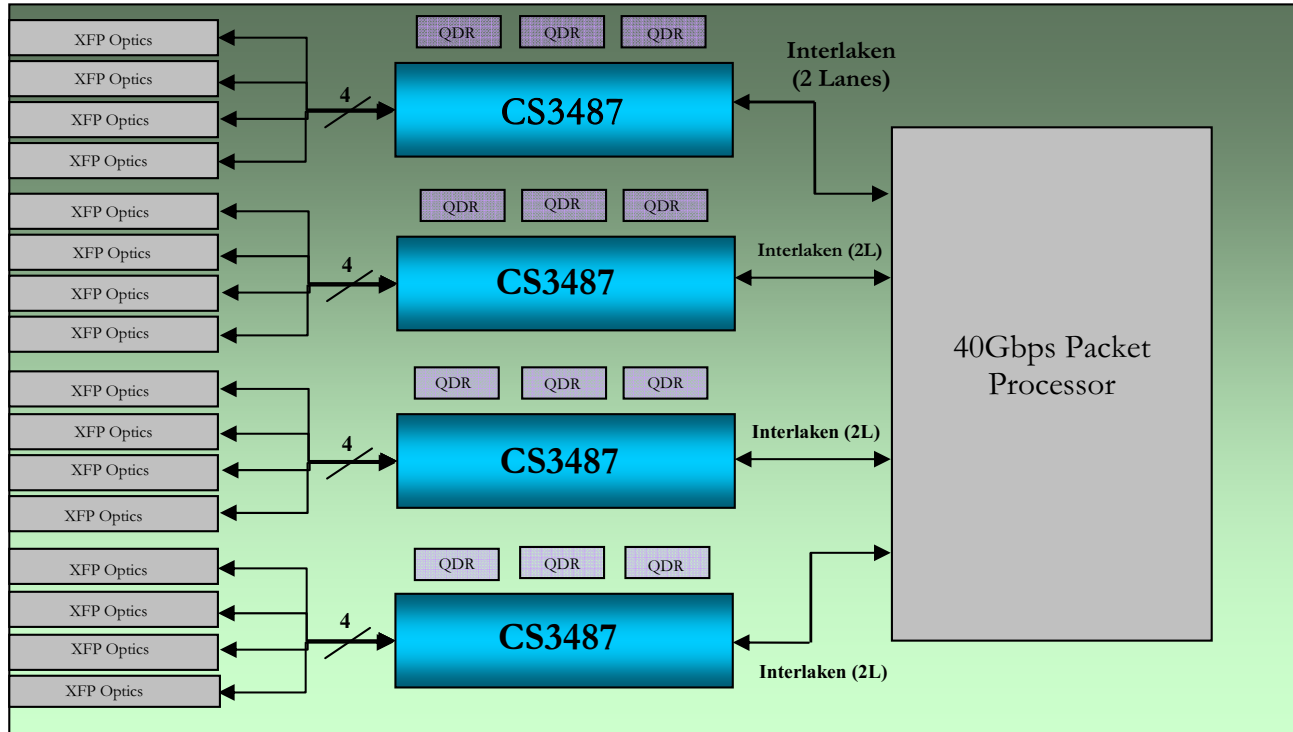
Technology:

- 1369-ball BGA, 37.5x37.5mm
- 0.13 μm CMOS

Application: Oversubscribed Switch/Router Line Card (2:1)



Application: Oversubscribed Switch/Router Line Card (4:1)



Cortina in Communications

Cortina is a leading supplier of intelligent communication solutions through continuous innovations in advanced port processing and intelligent port connectivity to the Core, Metro, Access and Enterprise Market Segments. With our state-of-the-art high speed analog digital integration, we deliver a wide suite of products that address our customers' performance, density and

flexibility needs enabling faster time-to-market, longer time-in-market, and increased revenue opportunities. Working closely with our customers to understand their system requirements and anticipate their needs, we are creating the foundation ingredients for new generations of services.

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