Cortina Systems® CS3477 4-port 10G Line-rate or Oversubscribed Ethernet Aggregator
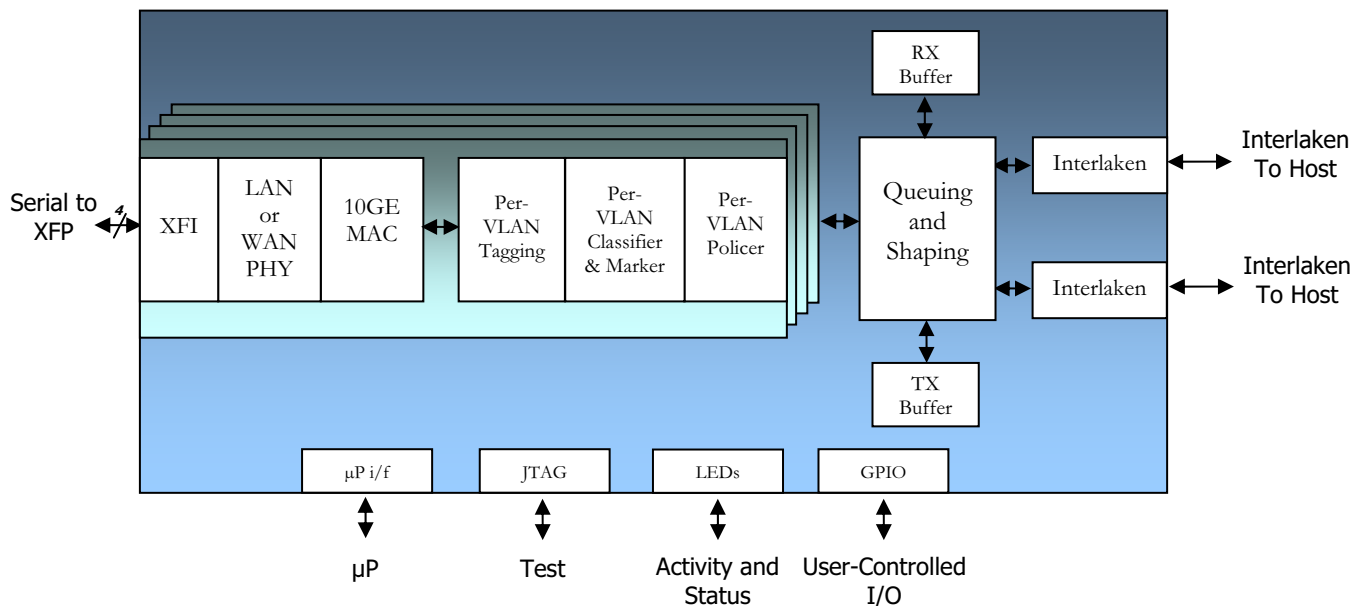
Overview

The Cortina Systems® CS3477 4-port 10 Gigabit Line-rate or Oversubscribed Ethernet Aggregator (CS3477 Ethernet Aggregator) is a 4-port 10 Gigabit line-rate or oversubscribed 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. Optional cut-through operation minimizes latency for line-rate applications. With advanced classification through Layer 4, four queues per port, and strict priority and round-robin scheduling options, the CS3477 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 System, 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.

CS3477 Ethernet Aggregator Block Diagram

Product Brief Number: 400014-2.1

Features

Functionality:

- 4 x 10 Gigabit Ethernet MACs
- LAN or WAN PHY on any port
- 4 x XFI SerDes
- 2 x Interlaken to host
- Cut-through or store-and-forward line-rate options
- Rule-based classification engine and frame parser through Layer 4, including support for IPv6
- RFC2698 policing to committed and peak information rate
- MEF-compliant per-VLAN policing, statistics, classification, and tagging
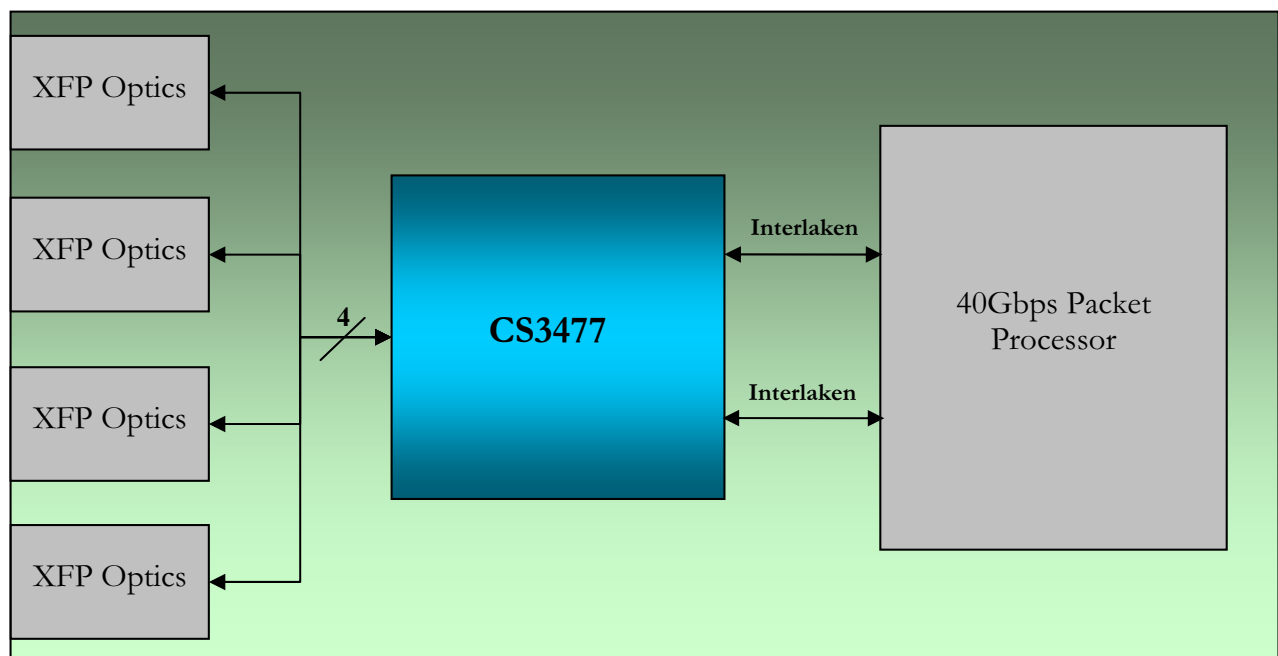- Standard Ethernet MIBs and RMON (RFCs 2665, 2819)

Interfaces:

- Interlaken to host: 5 lanes @ 6.25 Gbps or 8 lanes @ 4.25 Gbps for line rate; user-selectable 2-8 lanes @ 3.125 – 6.25 Gbps for oversubscription
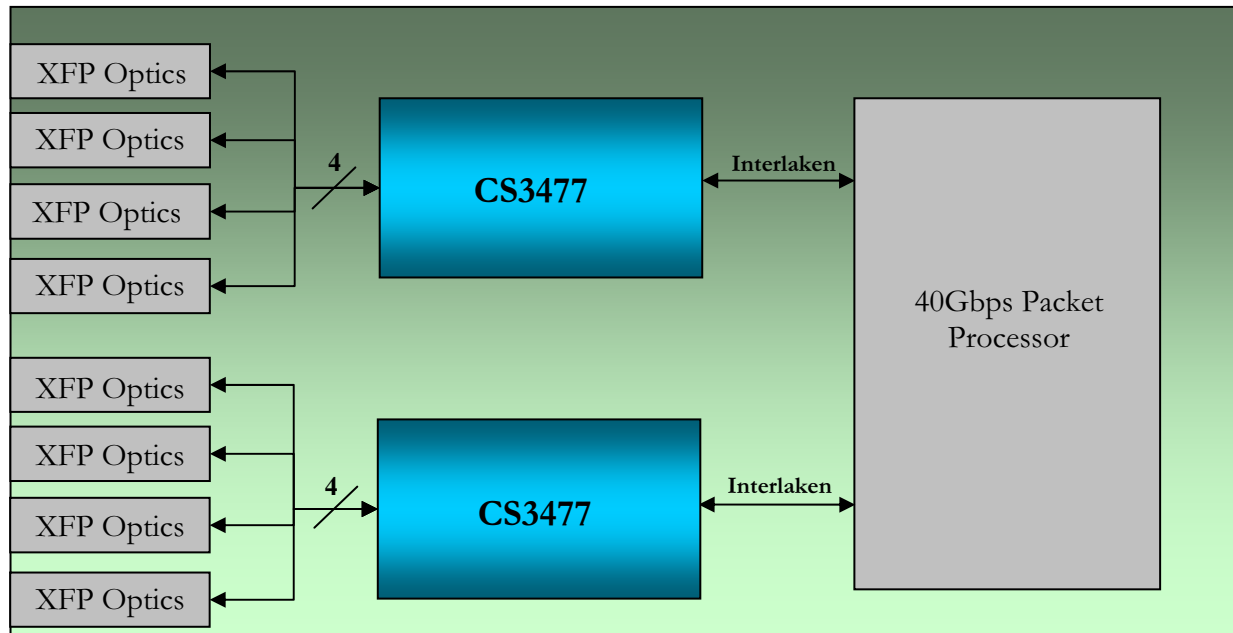- Intel*/Motorola*-style Microprocessor bus
- GPIO for LEDs
- JTAG

Technology:

- 1024-ball BGA, 33x33mm
- 0.13 µm CMOS

Application: Line-rate Switch/Router Line Card

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

XFP Optics		
XFP Optics	4	CS3477	Interlaken	40Gbps Packet Processor
XFP Optics		
XFP Optics		
XFP Optics		
XFP Optics	4	CS3477	Interlaken	
XFP Optics		
XFP Optics		

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.

*Other names and brands may be claimed as the property of others.

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LINKING PEOPLE GLOBALLY

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