

# **Product Brief**

### CS8120 10 Gbps EPON OLT Product Brief

## **Product Description**

The Cortina Systems<sup>®</sup> CS8120 10 Gbps EPON OLT (CS8120 OLT) is an efficient solution for production 4-port 10G EPON line cards. It supports both 10G and 1G EPON for backward compatibility with deployed 1G ONUs.

To reduce costs and lower power consumption, the CS8120 OLT integrates all traffic management and switching functionality to be able to connect to a backplane directly. To manage the increase in bandwidth, the CS8120 OLT has advance traffic management implementing hierarchy schedulers, multi-level shaping, policing, rate limiting, and subscriber/service-based bandwidth management. The CS8120 OLT is compliant with the latest carrier specifications (for example, CTC v2.1). Unlike programmable FPGA solutions for prototyping, the CS8120 OLT is a production-worthy integrated ASIC device.

#### **Features**

- Full compliance with the IEEE 802.3ah and CTC specification
- Integrated 802.1D compliant bridging
- Subscriber identifier based on LLID, VLAN, MAC DA/SA, IPV4 DA/SA
- Subscriber SLA based packet classification
- Full support for IEEE 802.1ad & 802.1Q VLAN mapping and processing with dedicated Full 4 K VLAN-ID ranges for both upstream and downstream traffic
- Full support for CTC Selective Q-in-Q function for two CTC VLAN models: PUPV and PUPSPV
- Full support for 802.3ah OAM, CTC 2 OAM extension, as well as Ethernet OAM
- Supports IPV6 MLD and IPV6 DA/SA classifications
- Advanced traffic management to include traffic policing, marking, scheduling, shaping, WRED-TD, and buffer managements
- Intelligent Dynamic Bandwidth Allocation (DBA) with dedicated processor
- Protection switch support for NNI ports
- Supports 1PPS, 802.1AS and IEEE Std. 1588v2 transparent mode
- Supports OLT Optical Management (OPM,LAO, and LOL)
- Embedded microprocessor for EPON system management and control

### **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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