WaveLogic 5 Nano 100G/200G CFP2-DCO

Ciena's WaveLogic 5 Nano 100G/200G CFP2-DCO is a dual-rate, single carrier, C-band coherent transceiver capable of transmitting and receiving up to 2x100 Gb/s of client payload on a single wavelength. Advanced coherent DSP technology, combined with a highly integrated, tunable optical subassembly, enables highly flexible coherent transmission in a compact, pluggable form. This CFP2 MSA-compliant module delivers an industry-leading solution for high-bandwidth, high-performance line-side DWDM transmission for both telecom and data center applications.

The module supports operation at 28GBaud dQPSK for 100G interoperable industry standards defined by the ITU-T, CableLabs, and Open ROADM. Enhanced performance modes at 32GBaud are also supported as well as a range of client-side signaling options for Ethernet and OTN clients.

WaveLogic 5 Nano 100G/200G CFP2-DCO supports various system applications, including transponder, OTN-switched, packet-switched, or router interfaces. The hardened variant of the module supports extended operating temperature ranges for exterior deployments.

The module supports industry platforms with CFP2 compatible sockets as well as Ciena's Converged Packet Optical and Packet Networking products.

Features and Benefits
- Single-carrier 100G/200G Coherent Optics
- 100G 28GBd dQPSK SC-FEC interoperable mode for
  - ITU-T G.709.2/G.698.2
  - CableLabs P2P Coherent Optics PHY
  - OpenROADM MSA
- Enhanced performance modes
  - 100G 32GBd QPSK SD-FEC
  - 200G 32GBd 16QAM SD-FEC
- Versatile client interface support
  - CAUI-4 with 802.3bj FEC for 100GE
  - OTL4.4 with GFEC for OTU4
  - OTLC2.8 with GFEC for OTUC2
- MDIO management interface to host systems for configuration and monitoring
- Line and host side PRBS and loopbacks support
- Hardened variant (100G only) with extended operating case temperature
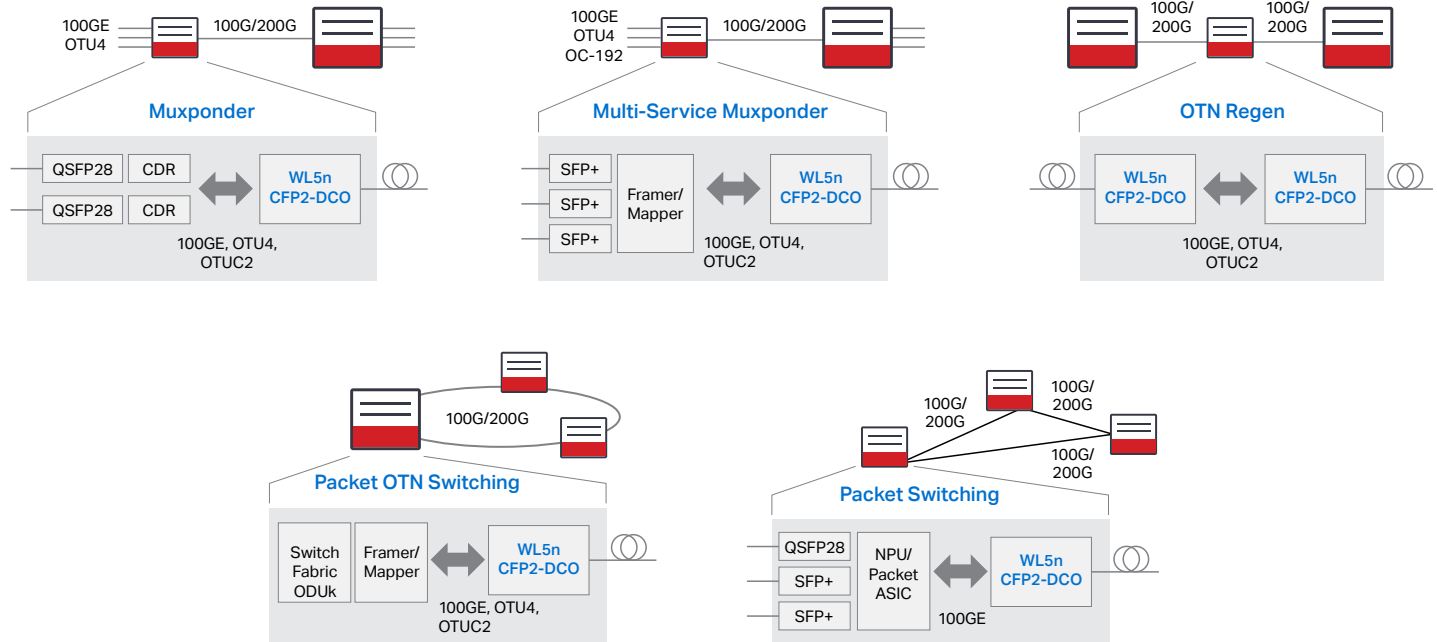- CFP2 MSA-compliant form factor

Network applications
- Transponder/muxponder
- Access unamplified/amplified links
- DCI
- Metro/regional networks

Fully tunable through C-band frequency range, the module also has embedded PRBS generator/analyzer and line- and client-side (host) loopbacks for diagnostics.

The mechanical form factor, 104-pin connector and MDIO host interface for configuration, control and monitoring are standard CFP2 MSA-compliant.

WaveLogic 5 Nano CFP2-DCO implementations