Press Release

June 1, 2021
Fujitsu Optical Components Limited

100GBaud Integrated Coherent Receivers for 800G Optical Networks

Fujitsu Optical Components Limited (FOC) announced today that it is launching a 100GBaud integrated coherent receiver for applications in 800 Gbps optical networks.
This new product integrates a 90-degree hybrid, balanced receivers, polarization beam splitter and VOA function into a small, single package using micro assembly technology. Furthermore, FOC is investigating the development of new products for applications in 128GBaud and beyond optical communication systems.

【100GBaud Integrated Coherent Receiver】

In recent years, network capacity has been increasing due to the increase in big data, IoT, and video content. It is expected that IP traffic will continue to grow due to the rapid rise in video gaming, streaming, remote work and online meetings as a result of recent work style reforms. FOC will continue to contribute and adapt to our society's needs by providing a stable supply of high-quality optical component products using its core technologies. We have been leading the global coherent communication market by commercializing the most advanced discrete optical transmitter and receiver devices. For transmitters, our cumulative sales of coherent LN modulators exceeded 1 million units this year, maintaining the world's top share (*1). For receivers, we have succeeded in developing a 100GBaud integrated coherent receivers that supports single-wavelength 800 Gbps optical networks. We have already started supplying these receiver product samples and are targeting commercialization in the second half of 2021.

・Supports transmission capacity and distance optimization for flexible modulation schemes

The 100GBaud integrated coherent receiver supports three times higher symbol rates than the traditional 32GBaud integrated coherent receiver. This supports flexible QPSK and xQAM modulation methods from 32GBaud to 100GBaud, enabling optimization of the transmission distance and capacity of optical networks.

・OIF compliant shape, interface, characteristics

Although our 100GBaud integrated coherent receiver has a higher symbol rate, our package shape, interface, and characteristics are compliant with OIF regulations (*2) and are suitable for multi-supplier adoption, similar to that of 32GBaud integrated coherent receivers. In the future, we aim to develop products for optical communication systems exceeding 128GBaud and to support wavelength expansion to the L-band spectrum.

【Note】

(*1)https://www.fujitsu.com/jp/group/foc/en/subsidiary-gig5-sample/about/resources/news/press-releases/downloads/20210331.html

(*2) OIF Implementation Agreement OIF-DPC-MRX-02.0

【Additional Information】

・https://www.fujitsu.com/jp/group/foc/en/index.html

【Trademark】

【Contacts】

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About Fujitsu Optical Components

Fujitsu Optical Components is a leading global supplier of the most advanced, high performance optical component solutions for high-speed optical networking applications (i.e.-backbone networks, metro networks and data center interconnects). Our product line-up includes 100G and beyond Coherent Transceivers, 100G CFP/CFP2/QSFP28 Transceivers, 100G/400G LN Modulators and 100G/400G Coherent Receivers. For additional information, visit https://www.fujitsu.com/jp/group/foc/en/index.html