



Point2 Technology Introduces RangeXtender for Fronthaul and Backhaul in 5G Networks

Allows Existing High-speed Fiber Links to Increase Their Reach from 10 km to 30 km Without Expensive Fiber Extension and Compensation Filters

San Jose, Calif., June 7, 2021 – Point2 Technology, a leading provider of high-performance solutions for cloud and 5G infrastructure, today introduced the 5G RangeXtender™, an SFP28 module with proprietary electronic dispersion compensation that extends the reach of fronthaul and backhaul in 5G networks. This not only increases the reach of existing fiber transmission paths up to 30 km, but also reduces CAPEX and OPEX, delivering a reduction of up to 25% in total cost of ownership.

At the heart of the 5G RangeXtender is the PT-E1012322 Electrical Dispersion Compensation (EDC) SoC that combines two lanes of bidirectional clock-and-data recovery (CDR) and EDC with a CDR/retimer and significantly compensates for distortion caused by dispersion and reduces bit-error rate. It has latency of less than 16 ns, consumes about 9 mW/Gb/s, and provides for tests such as pattern generation and checking and local and remote loopback via a real-time eye scanner. The SoC is in a tiny CSP package that easily fits in SFP28 modules.

“As 5G is deployed, wireless carriers will need to support enormous increases in traffic, which means they will need to upgrade the data rates of their fiber links for fronthaul and backhaul from 10 Gb/s to 25 Gb/s and soon to 50 Gb/s,” says Point2 CEO Sean Park. “This will require significant investments in infrastructure long before they can realize revenue from it. Our RangeXtender essentially allows existing fiber infrastructure to increase reach from the current 10 km to 30 km through the use of a unique EDC/CDR SoC. The result is much lower cost of ownership because it reduces the need for costly fiber extension, dispersion compensation filters, and amplification while enhancing link performance on the aging fiber”.

The 5G RangeXtender EDC SoC’s integrated CPU allows integrators to easily customize the device, and it is available in a reference design along with the linear receiver optical subassembly (ROSA) to let multiple module suppliers deliver this solution. Point2 is in partnership discussions with Tier 1 module suppliers who supply the 5G ecosystem to accelerate ramp-up and provide diversity in multi-sourcing. The technology currently supports a 25-Gb/s solution with a roadmap to deliver up to 100 Gb/s for future access networks.

Availability

The 5G RangeXtender/PT-E1012322 with 25-Gb/s capability is sampling now, and production is expected in Q4 2021.



Press Release

About Point2 Technology

Point2 Technology, headquartered in San Jose, Calif., designs and manufactures low-power, high-speed, point-to-point interconnect and range enhancement solutions designed to meet the bandwidth requirements of cloud-based data centers at 5G infrastructure. For more information, please contact Point 2 at info@point2tech.com or www.point2tech.com.