ANNOUNCEMENT

Fujitsu unveils 150 GBaud capability for 1FINITY™ Ultra Optical System

March 12, 2024

Fujitsu Network Communications, Inc. today introduced 150 GBaud enhancements for the 1FINITY Ultra Optical System, empowering extreme scale and terabit performance for long-haul, metro and data center interconnect (DCI) optical networks. This hyper-reliable optical transport platform comprises the 1FINITY T900 Series Transponder, which now offers operation up to 150 GBaud for even more speed, capacity, reach and flexibility.

With a powerful digital signal processor (DSP) supporting higher channel capacity, the enhanced 1FINITY T900 Series Transponder further extends the reach of 1.2 terabits per second (Tbps) per wavelength transmission in high-speed DCI and metro optical networks. Moreover, the higher baud rate of 150 GBaud, in combination with a more robust forward error correction (FEC) algorithm, enables 800G wavelength transmissions to reach up to 30 percent farther in long-haul networks. In fact, Fujitsu set the record for optical signal transmission, with the 1FINITY T900 Series Transponder the first in the industry to demonstrate 1.2 Tbps per wavelength transmitted over 336 km in a commercial network.

In addition to providing performance improvements, the enhanced 1FINITY T900 Series Transponder helps communications service providers (CSPs) and cloud infrastructure providers (CIPs) realize cost savings as well. First, the higher baud rate means that fewer transponders are needed, versus alternate solutions in the market, reducing overall transport infrastructure cost. Second, an energy-efficient design allows higher speeds without increasing power consumption per bit.

“With enhanced 150 GBaud functionality, we have further strengthened our already best-in-class 1FINITY Ultra Optical System offering, enabling greater speed, reach, and flexibility with lower total cost of ownership” said Rod Naphan, senior vice president and head of the photonics systems business unit at Fujitsu. “The 1FINITY T900 Series Transponder delivers the ultimate in hyper-reliable terabit networking across long-haul, metro and DCI transport networks.”

Date and region of launch

APAC, North America and Europe: summer 2024

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