

Accelink launch carrier-grade 100G QSFP28 LR & ER module

QSFP28 has become the mainstream package for 100G optical modules used in the telecom market. According to the forecast of Lightcounting (see Figure 1), the demand of 2021 will be about 1.9 million and keeps growing every year. The current 100G QSFP28 module generally adopts 4x25G NRZ scheme and its process is complicated. While the PAM4 and 50G components become technically mature, 100G rates can be achieved in a single channel, which will lead to easier packaging processes, lower costs and better delivery.

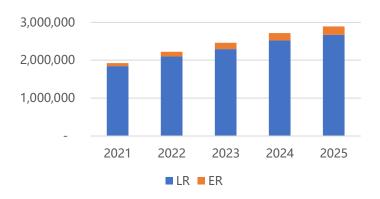


Figure 1. Forecast 100G QSFP28 LR&ER

Compared with the 4x25G NRZ scheme, the single-wave 100G scheme has the following advantages: First, the number of optical chip is less. For TX and RX, there need only one optical chip for each part. Second, the traditional TO component can be used for more elegant packaging. Third, the power consumption is lower, LR is lower than 3.5W while ER is lower than 4W. What's more, FEC function is integrated which can be compatible with the 4x25G electrical interface on the existing equipment.

The Accelink 100G QSFP28 LR/ER has DSP inside, four 25Gbps NRZ signals on the electrical side and 50G baud rate (single-wave 100G) PAM4 signals on the optical side. The cooled and hermetic packaging transmitter can meet the requirements of telecom standard. The LR type uses 50G EML and PIN to achieve 10km communication and the ER uses 50G EML and APD to achieve 40km. The operating temperature range is commercial temperature (0~70 $^{\circ}$ C) for both type. The LR type refers to IEEE 802.3cu and the ER refers to 100G Lambda MSA standard.







Figure 2. Accelink 100G QSFP28 LR & ER

Accelink pursues the concept of "To provide customers with more valuable products and services" all along. We focus on customer demand and constantly introduce better solutions to create value for customers.