ABSTRACT

A single-fiber bidirectional optical transceiver module (100). An optical port (60), a circulator assembly (30) and an optical receiving assembly (20) inside the single-fiber bidirectional optical transceiver module are sequentially arranged from left to right, wherein at least part of the structure of an optical transmitting assembly (10) is arranged in the left front of the optical receiving assembly (20). The single-fiber bidirectional optical transceiver module (100) further comprises an optical guide assembly (40), wherein at least part of the structure of the circulator assembly (30) is arranged at the right rear of at least part of the structure of the optical guide assembly (40); the optical transmitting assembly (10) transmits transmitted light to the left; the optical guide assembly (40) is used for guiding the transmitted light to enter the circulator assembly (30); and the transmitted light is propagated to the right rear during at least part of the process of propagating the transmitted light by the optical guide assembly (40). By means of redesigning the structure of the single-fiber bidirectional optical transceiver module (100) and a positional relationship between internal structures, the space utilization rates of the positions of the optical transmitting assembly (10) and the optical receiving assembly (20) are improved, such that a circuit board can be longer and can integrate more components, thereby improving the integration degree of the single-fiber bidirectional optical transceiver module (100).

Fig 2.