

ABSTRACT

An optical module (100). In the optical module (100), a bare die (4) is directly flip-mounted on a circuit board (3) of the optical module (100), such that high-speed signals on a host side and a line side can directly enter the interior of the bare die (4) through an electrical interface (3223) of the circuit board (3) into the circuit board (3). Therefore, the link of high-speed signals can be simplified, impedance abrupt change points are reduced, the transmission stability of the high-speed signals is improved, the integrity of the signals is improved, the transmission rate is improved, and the optical module (100) with a higher rate is implemented. Moreover, the thermal expansion coefficient of a first insulating dielectric layer (311) of a core layer structure (31) of the circuit board (3) matches the thermal expansion coefficient of the bare die (4), which can effectively improve the reliability of the bare die (4) flip-mounted on the circuit board (3).

Fig. 2