

ABSTRACT

An optical module, comprising a packaging structure (100), wherein an optical transmitting module and/or an optical receiving module are packaged inside the packaging structure (100); a hard circuit board assembly (200), comprising a hard circuit board (220) and an electronic element provided on the hard circuit board (220), the hard circuit board (220) comprising a first surface layer (222) and a second surface layer (224) arranged opposite to each other, and the electronic element comprising a digital signal processor (210); and a first flexible circuit board (300), wherein one end of the first flexible circuit board (300) is electrically connected to a light-emitting module and/or a light-receiving module, and the other end extends between the first surface layer (222) and the second surface layer (224) of the hard circuit board (220), and is electrically connected to the digital signal processor (210). The optical module has strong anti-interference capabilities, and the crosstalk between multiple transmission channels on the first flexible circuit board (300) thereof is reduced. Furthermore, the space occupied by solder joints on the surface of the hard circuit board (300) is reduced, and the crosstalk between multiple transmission channels is reduced while also increasing the link bandwidth and ornament space.

FIG. 2