ABSTRACT OF THE DISCLOSURE

The present invention provides an optical interposer for chip connection including a first total internal reflective layer, a waveguide and a second total internal reflective layer. The optical interposer is disposed above a first photonic integrated circuit chip and a second photonic integrated circuit chip, coupling the first photonic integrated circuit chip and the second photonic integrated circuit chip. The refractive indices of the first total internal reflective layer and the second total internal reflective layer are lower than the waveguide, making a light signal perform repetitive total internal reflections at the junctions between materials and advance in a zigzag shape within the waveguide, and further transmits between the first photonic integrated circuit chip and the second photonic integrated circuit chip.

FIG. 1