

OPTICAL PHASED ARRAY CHIP AND SENSING METHOD THEREOF

ABSTRACT

An optical phased array chip includes: a light-emitting unit, configured to generate an optical emission signal; a beam-splitting unit, connected to the light-emitting unit, and configured to transmit the optical emission signal to an optical antenna unit and receive and transmit a diffusely reflected optical return signal to a photodetector unit; the optical antenna unit, connected to the beam-splitting unit, configured to transmit the optical emission signal, and configured to receive and transmit the diffusely reflected optical return signal to the beam-splitting unit; the photodetector unit, connected to the beam-splitting unit, and configured to receive and transmit the diffusely reflected optical return signal to a signal processing unit; and the signal processing unit, connected to the photodetector unit, and configured to receive the diffusely reflected optical return signal in an electric current signal manner converted by the photodetector unit and generate a sensing information.

[FIG. 1]