WHAT IS CLAIMED IS:

1. A pluggable optical packaging structure, comprising:

a substrate, disposed with at least one electronic integrated circuit and at least one photonic integrated circuit;

a carrier ring, located on the substrate, and the electronic integrated circuit and the photonic integrated circuit being in an area enclosed by the carrier ring;

at least one optical connection assembly, comprising at least one socket, at least one connector, a plurality of optical fibers and at least one optical fiber array connector, the socket being located in a partial section of the carrier ring, the connector being disposed in the socket, the optical fibers having one end coupled to the connector, the other end coupled to the fiber array connector, and coupled to the photonic integrated circuit through the fiber array connector; and

a cover plate, located on the carrier ring and extending inwardly to above the photonic integrated circuit,

wherein the carrier ring has at least one gap, and the socket is arranged in the gap, and

wherein the gap also has at least one positioning groove, at least one lug is provided at a corresponding position of the socket, and when the socket is arranged in the gap, the lug is also in the positioning groove.

2. The pluggable optical packaging structure according to claim 1, further comprising a heat dissipation unit, the cover plate having a window at the center, and the heat dissipation unit being located in the window and in contact with the electronic integrated circuit.

3. The pluggable optical packaging structure according to claim 2, wherein the heat dissipation unit is a heat sink, and the heat sink is located on the electronic integrated circuit.
4. The pluggable optical packaging structure according to claim 1, wherein the socket has at least one docking chamber, and the connector is arranged in the docking chamber.
5. The pluggable optical packaging structure according to claim 1, wherein the carrier ring comprises a plurality of fixing pieces stacked up and down in sequence and a bottom ring, the bottom ring is a closed ring and is located on the substrate, and the plurality of the fixing pieces are arranged on the bottom ring and form at least one gap, and the socket is located in the gap.
6. The pluggable optical packaging structure according to claim 1, wherein the optical fiber array connector has at least one first coupling portion, at least one second coupling portion is provided at a corresponding position of the top of the photonic integrated circuit, and when the optical fiber array connector is arranged on the photonic integrated circuit, the first coupling portion is coupled to the second coupling portion.