

# **8channels Tx TGV Photoelectric Interposer Chip**

#### **Product Introduction**

The 8channels Tx TGV optoelectronic interposer chip uses laser induction and deep silicon etching to achieve glass-based signal switching, and uses the redistribution layer (RDL) and micro-bump process to achieve a wiring bandwidth of more than 110GHz, significantly improving signal transmission efficiency and density; matching the mainstream eight-channel silicon photonic modulation chip and electric driver chip to achieve an 8-channel standardized solution, while being compatible with the pin definitions of mainstream silicon photonic chips and electric chips, achieving a high degree of integration of optoelectronic hybrid packaging; laser direct writing optical waveguides and interposer internal slots can be integrated on the chip to achieve low-loss and high-density optical path fan-in and fan-out.

#### **Performance Features**

- 8-inch wafer-level TGV MPW tape-out
- RDL and micro-bump process, wiring bandwidth exceeds 110GHz
- Support optoelectronic chip flipchip packaging
- Support low-loss optical waveguide laser direct writing
- Support three-dimensional structure slotting, support low-loss optical coupling

### **Key parameter indicators:**

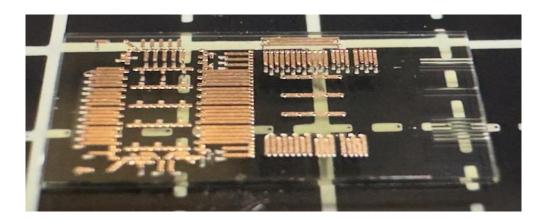
Parameters	Scope
Interposer chip size	10mm×9mm
Interposer glass thickness	265μm
Wiring bandwidth	> 110GHz
TGV hole opening	60μm—25μm
RDL line width and spacing	80μm/15μm
RDL thickness	3μm
PI thickness	5μm
Bump ball diameter	60μm

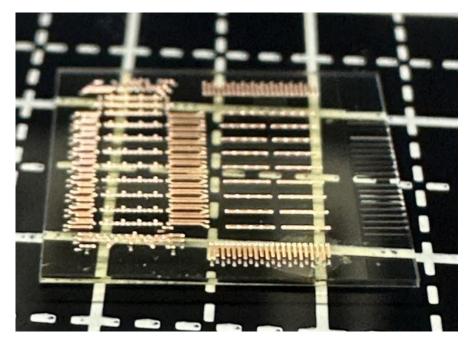
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## TGV chip application diagram:





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