

High Reliability Demonstration of 3 μm Photo-Vias in PID material for 2.5D Glass Interposer Applications

Takenori Kakutani, Visiting Engineer (Taiyo Ink Mfg. Co., Ltd.)



Objective:

- Challenge for high-density packaging is to maintain high reliability. To improve the package reliability, the high resolution dielectric material should have low CTE and strong adhesion.

Technical Approach:

- By minimizing the size of inorganic fillers, PID material with high resolution, low CTE, and good adhesion to substrate are produced.

Latest Results:

- 3 μm photo-microvias, with excellent adhesion were demonstrated in a PID material.
- Very stable daisy chain containing 400 microvias with 3 μm diameter passed 2,000 cycles of TCT reliability test.

