

Plastic BGA Substrate

Features

■ Plastic BGA Substrate

SHINKO provides organic substrates using prepreg for BGA packages in logic, memory, and sensor devices, etc.

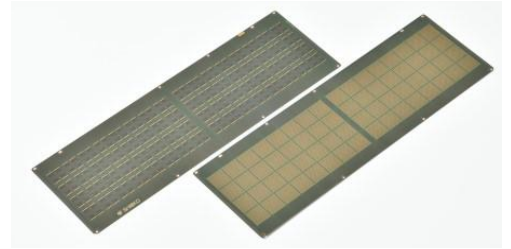
● 2 Layers / 4 Layers Substrate with Through Hole

- Substrate with low cost and high reliability
- Superior electrical characteristics

● Build-up Substrate ~IVH*~

- Thinner substrate thickness is available by using thin core. (ex. less than 150 μ m total thickness with 4 layers)
- Multilayer structure consisting of 4 or more layers is possible.
- Available for both WB (Wire Bonding) and FC (Flip-Chip)
- High density is possible by using semi-additive process and laser vias.
- Structure of via on PTH (Plated Through Hole) and structure of stacked via are supported.

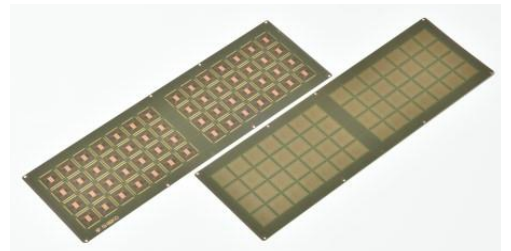
*IVH : Interstitial Via Hole



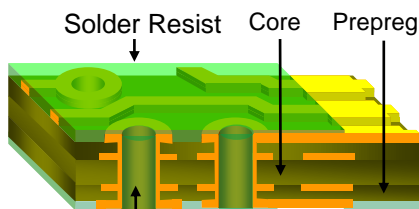
■ Plastic BGA Coreless Substrate ~IVH3~

SHINKO provides coreless substrate using IVH technology for improving performance in a thinner form factor.

- Ultimate substrate thickness reduction is possible by removing core layer. (ex. 80 μ m or less total thickness with 3 layers)
- Superior electrical characteristics
- Multilayer structure consisting of 3 or more layers is possible.
- Available for both WB (Wire Bonding) and FC (Flip-Chip) interconnect
- High density is possible by using semi-additive process and laser vias.
- Structure of stacked via is supported.

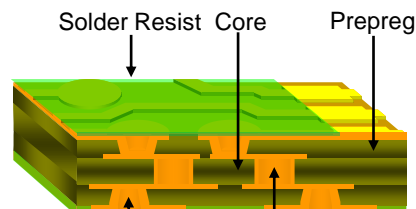


Structure



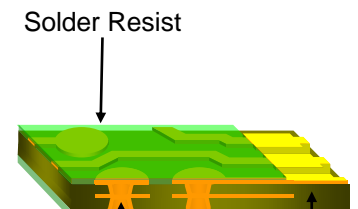
Through Hole (Drill)

4 Layers Substrate with Through Hole



Through Hole (Drill/Laser: Cu Filled hole is possible.)

4 Layers IVH



Via (Laser)

All layer with Prepreg

3 Layers IVH3

