Ceramic/Hermetic Package Assembly

Ceramic/Hermetic packages are commonly used for applications requiring high performance and high reliability. They can generally withstand higher temperatures than traditional plastic packages, and the relatively low CTE of ceramic materials and the cavity construction also make ceramic/hermetic packages ideal for extremely stress-sensitive devices such as MEMs sensors.

Amkor supports a wide range of assembly options for ceramic/hermetic packages, including commercial, automotive, and military/aerospace process flows. The assembly line is highly customizable, allowing assembly of a large variety of commonly used ceramic/hermetic packages.

Services and Support

Amkor has a broad base of resources available to help our customers bring quality new products to market quickly and at low cost.

- Full package characterization
- Thermal, mechanical stress and electrical performance modeling
- Turnkey assembly, test and drop ship
- World class reliability testing and failure analysis

Ceramic/Hermetic

Common Package Families

- Ceramic Ball Grid Array (CBGA)
- Ceramic Pin Grid Array (CPGA)
- Ceramic Land Grid Array (CLGA)
- Ceramic Quad Flat Pack (CQFP)
- Ceramic SOIC (CSOIC)
- CerDip
- CerPak
- “J”Cerquad
- Leaded Chip Carrier (LDCC)
- Leadless Chip Carrier (LCC)
- Low Cost Pin Grid Array (LCPGA)
- Plastic Pin Grid Array (PPGA)
- Side Braze
- Flatpack
- Flatpack with Ceramic Bar (FPCB)

Process Options

- Wafer backgrinding
- Die attach cure/organic burn out up to 425°C
- Eutectic bonding
- Glass or solder seal up to 435°C
- Temperature cycling
- Centrifuge
- Tin plating
- Pin D testing
- Laser or ink marking
- Fine leak testing
- Gross leak testing

Material Options

- Aluminum or gold wire interconnect
- Ag glass or epoxy die attach

Note that ceramic package base and lid can be purchased from several well known suppliers and should be consigned to Amkor for production assembly. Contact your Amkor account management team for more details.

Visit Amkor Technology online for locations and to view the most current product information.

Amkor Technology®

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