

Product Description

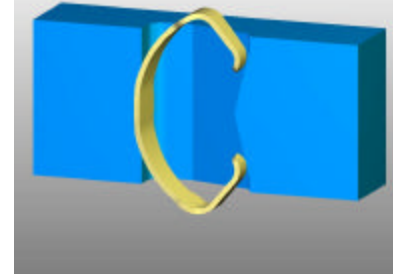


The InterCon cLGA[®] land grid array socket system was designed to bring conventional connector material construction to a high performance, low cost socket design. Gold over nickel plated beryllium copper spring contacts guarantee industry understood long term connector performance in a design that also guarantees contact retention and ruggedness during handling and use.

The patented¹ cLGA[®] product design features a C shaped beam, which is held in its contact housing by means of a retention feature molded into each contact cavity. This retention feature engages the contact gap to hold the contact reliably in the housing. Positive contact retention allows the socket to be dropped from several feet to a rigid surface with no loss of contacts or other product damage.



The ramped retention feature in each housing cavity allows the contact to deflect when mated between upper and lower surfaces. The product is very low profile, requiring only .048 inches (1,22 mm) between mating surfaces.



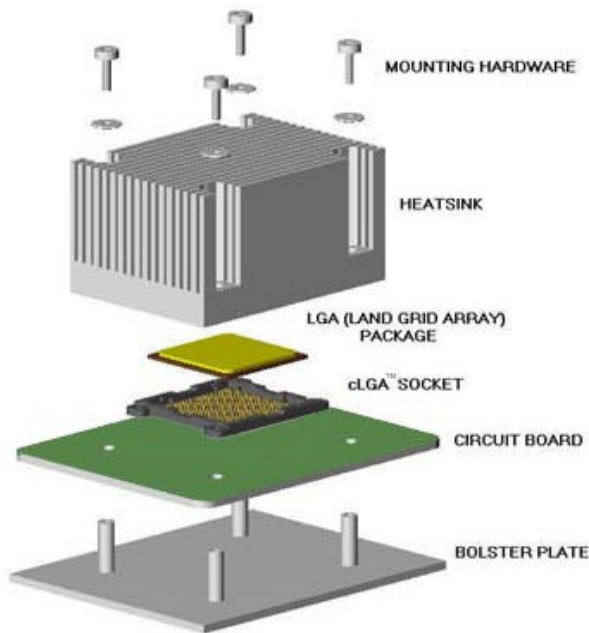
Contacts are assembled into contact housings in high speed automatic assembly equipment, and these housings typically are heat staked to separately molded frames to create complete socket products.

The cLGA[®] socket is fully qualified under the [EIA-540BOAE](#) and [Telcordia GR-1217-CORE](#) specifications. See the 'EIA/Telcordia Qualification Report' section of this page for full test information.

Because of its low profile between mating surfaces, the product operates at greater than 7 gigahertz frequencies. See the 'Electrical Performance' section of this page for the high speed test report.

¹ U.S. Patent numbers 6,176,707 and 6,217,342. Other patents pending.

The cLGA[®] product is available in standard .050" and 1 millimeter centerline standard configurations. Current industry standard sizes are available in 937, 1089, and 1657 position sizes.



Standard application of cLGA[®] sockets in chip-to-board mating is achieved using a lower bolster plate and upper heat sink above the ceramic device. Standard mounting hardware can be used. The cLGA[®] socket mates to gold plated pads on both board and device surfaces.

Standard products can be selectively loaded to create custom contact arrays. A two piece frame and insert housing design means that custom frames can be designed and built with low tooling cost and short lead time for specialized applications.

Large contact array sockets are achieved by combining multiple housings in an outer frame for interconnecting high signal count multi chip modules. Current products approach 4000 contacts per device, with 5000 contacts per device now in design.

cLGA[®] technology is also available as cSTACK[™] board-to-board or flex circuit-to-board stacking connectors. In these product applications, the cSTACK[™] connector is a low cost, high signal integrity, solderless alternative to standard two piece connectors.



The cLGA[®] product family represents low cost, high signal integrity, high reliability next generation chip-to-board, flex-to-board, and board-to-board interconnection technology.