ABSTRACT

HEAT SPREADER INTERCONNECT FOR THERMALLY ENHANCED PBGA PACKAGES

A PBGA package is provided. The heat spreader interfaces with the substrate with the standoff of the heat spreader. The stand-off of the heat spreader is provided with an opening, the stand-off of the heat spreader is aligned with the substrate of the PBGA package by means of a copper pad that is provided over a second surface of the substrate. A solder bump is further provided over the surface of the copper pad. Thermally conductive solder is deposited over the opening of the heat spreader and over the copper pad. If the heat spreader stand-off is aligned with contact pads, thermally conductive epoxy is deposited over the contact pads. (Fig. 2A)