Abstract

ENHANCED BGA GROUNDED HEATSINK

A new method is provided for a low resistivity connection between a wire bonded IC chip that is mounted on a heatsink and the heatsink of the package. A copper trace connection for this purpose is on the surface of the substrate to which the IC chip is connected. An opening is in the substrate , which aligns with the copper trace for establishing a ground connection and penetrates the substrate of the underlying heatsink. The opening is filled with a conductive epoxy establishing a direct electrical connection between the allocated copper trace and the underlying heatsink. By connecting the ground point of the IC chip to the allocated copper trace, a direct electrical low resistivity connection is made between the ground point of the IC chip and the heatsink into which the IC chip is mounted. (Fig. 2a)