ABSTRACT

The present invention relates to a lead frame design for IC packaging to reduce chip stress and deformation and to improve mold filling. The die-pad is split into several sections which are jointed together by flexible expansion joints. The split die-pad allows relative motion between the pad and the chip during die attach cure. It also breaks down the total die pad area (and length) that is rigidly attached to the chip into smaller sections. These two factors reduce the magnitude of coefficient-of-thermal expansion (CTE) mismatch and out of plane deformation of the assembly, resulting in lower chip stress and deformation and improved package moldability.

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