Abstract

EXTENDED REDISTRIBUTION LAYERS BUMPED WAFER

A semiconductor device is manufactured by, first, providing a wafer, designated with a saw street guide, and having a bond pad formed on an active surface of the wafer. The wafer is taped with a dicing tape. The wafer is singulated along the saw street guide into a plurality of dies having a plurality of gaps between each of the plurality of dies. The dicing tape is stretched to expand the plurality of gaps to a predetermined distance. An organic material is deposited into each of the plurality of gaps. A top surface of the organic material is substantially coplanar with a top surface of a first die of the plurality of dies. A redistribution layer is patterned over a portion of the organic material. An under bump metallization (UBM) is deposited over the organic material in electrical communication, through the redistribution layer, with the bond pad. (Fig. 10B)