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ABSTRACT

TEST COUPON PATTERN DESIGN TO CONTROL MULTILAYER SAW SINGULATED PLASTIC BALL GRID ARRAY SUBSTRATE MIS-REGISTRATION

A new method is provided for evaluating the alignment of inner layers of interconnect layers. A test pattern is inserted within and as part of the process of creating a saw singulated plastic ball grid array substrate. The test pattern comprises a test point of reference for each inner layer of the substrate and multiple measurement points relating to the point of reference whereby each of these multiple measurement points is indicative of an amount of clearance or misalignment with respect to that inner-layer. By measuring electrical continuity or lack thereof between the point of reference and the respective multiple measurement points relating to the point of reference and by identifying which of the multiple points is shorted to the point of reference, the mis-alignment of the inner layers of the saw singulated plastic ball grid array substrate can be determined. (Fig. 2)