

ABSTRACT

ON-BONDER AUTOMATIC OVERHANG DIE OPTIMIZATION TOOL FOR WIRE BONDING AND RELATED METHODS

A method of providing a z-axis force profile applied to a plurality of bonding locations during a wire bonding operation is provided. The method includes: (a) determining a z-axis force profile for each of a plurality of bonding locations on an unsupported portion of at least one reference semiconductor device; and (b) applying the z-axis force profile during subsequent bonding of a subject semiconductor device. Methods of: determining a maximum bond force applied to a bonding location during formation of a wire bond; and determining a z-axis constant velocity profile for formation of a wire bond, are also provided.

Fig. 6