

NON-DESTRUCTIVE INTERCONNECT SYSTEM FOR SEMICONDUCTOR
DEVICES AND A CARRIER ASSEMBLY FOR USE THEREWITH

Abstract of the Disclosure

An interconnect system for providing electrical connection to bond pads of a semiconductor device (14) includes a socket (18) having a plurality of conductors (16) and a carrier assembly (10) receivable in the socket (18) carrying a semiconductor device (14). The carrier assembly comprises a substrate assembly (12) and a latch assembly (22, 122, 222). The substrate assembly (12) includes a substrate (12a) having a compliant membrane (12f) and a plurality of contact bumps (12i) on a top surface of the compliant membrane (12c) for contacting bond pads on the semiconductor device (14). The force applying latch assembly (22, 122, 222) applies pressure in making a temporary electrical connection between contact bumps (12i) and the bond pads of semiconductor device (14). Latch assembly 222 comprises a latch (232) which cooperates with a spring (231) to place a force on a lid (224, 324, 424) which in turn places a force on the semiconductor device (14). An ejector member (250, 350) is mounted on the lid to apply a force on the semiconductor device to separate the semiconductor from the lid upon removal of the lid from the carrier assembly (10).

Figure 4