LIFT SCREW FIXTURE FOR BOARD TO BOARD MODULE

HP INC
Lift screw fixture for board to board module

In some PC system design, a daughter board or a module would have B2B (board to board) connector design to connect the daughter board and the mother board, and the daughter board is very difficult to remove once it is installed on the mother board in the system chassis due to limited z-height and spacing. The extraction force of B2B connector usually is very strong, and there is no much room to pull the daughter board up between the daughter board and the mother board by fingers or tools in a compact system chassis. The room around the daughter board or module is limited by other components and thermal modules in the chassis, and the limited room makes any tools hard to use in a compact system chassis.

A screw fixture for daughter board or module could lift the daughter board or module from the mother board easily. The screw fixture can be added to some current daughter board or module designs without modification. It is an alternative solution to release the B2B connector between the daughter board and the mother board in a compact system chassis.

The following steps and figures describe how it works.

1. Put the screw into the screw hole of daughter board.
2. Insert the screw into the screw fixture, like a crab claw to clip the screw.
3. The screw fixture also can clamp the board edge.
4. Turning the screw to the right will press the daughter board down and mate into the B2B connector.
5. Turning the screw to the left will lift the daughter board up and make the B2B connector unmated.

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