

Technical Disclosure Commons

Defensive Publications Series

January 2020

ROTATABLE SHIELDING CAN DESIGN

HP INC

Follow this and additional works at: https://www.tdcommons.org/dpubs_series

Recommended Citation

INC, HP, "ROTATABLE SHIELDING CAN DESIGN", Technical Disclosure Commons, (January 30, 2020)
https://www.tdcommons.org/dpubs_series/2919



This work is licensed under a [Creative Commons Attribution 4.0 License](https://creativecommons.org/licenses/by/4.0/).

This Article is brought to you for free and open access by Technical Disclosure Commons. It has been accepted for inclusion in Defensive Publications Series by an authorized administrator of Technical Disclosure Commons.

Rotatable Shielding Can Design

Develop a flexible mechanical linkage feature to resolve the risk which a shielding can damages electronic components on mother board. This provides assembling and dismantling solution effortlessly so as to enhance the productivity in consistent quality.

The challenge we faced is whoever reworks the shielding can, the alignment feature from this disclosure can activate. The risk could be mitigated if a repairer damaged an electronic component when he or she is operating.

A common shielding can is not easy to assemble on a main board. The clippers on the board are too small to be identified. It causes the risk when a user assembles the shielding, he or she could hit the components around the shielding area.

In this publication, the shielding can separate from one can to two shielding cans which one of them is installed on clippers first, and then the other of them is aligned from the first shielding can. On the can, there is a pull tape to assist the repairer to change the shielding can. It manages the can could deform after repairing.

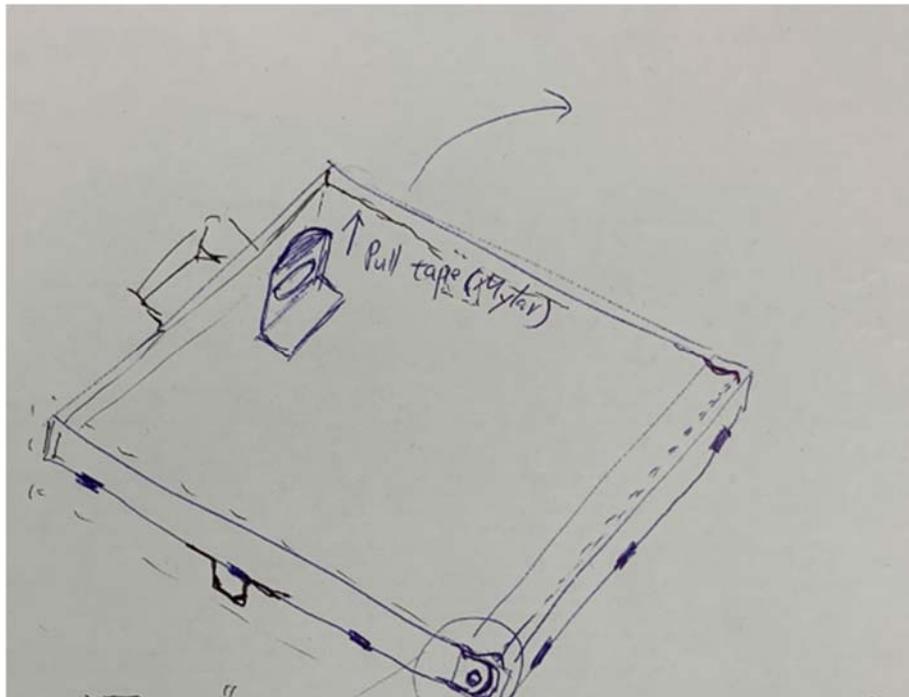
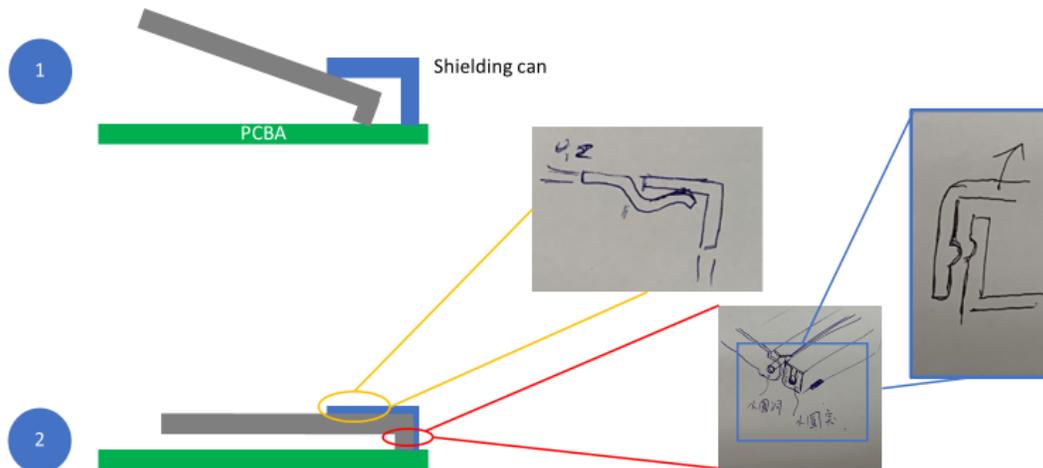


Figure 1. the concept of Rotatable Shielding Can

The way how to operate this design is to put the flexible shielding can under the fixed portion. On the flexible can, there is a shape to absorb the installation tolerance. When it is on deployed position, the repairer pushes the flexible can forward until it hits the fixed one. The knuckle on flexible are for located when it is installed. On the other side, the fixed can has two dent slots for the knuckle on the flexible can.

Product Drawing 2: Mechanical Installation Mechanisms



There is the bonus from this disclosure:

- 1) Another bonus from this idea is service team accesses to change the DIMM or SSD when the user opens the shielding can straightforwardly.
- 2) The shielding can is located more accurately. It can avoid the risk to damage electronic components during assembling or repairing with shielding can.
- 3) This also solves the issue which an end-user wants to upgrade the hardware by his own, even though he lacks experience how to assemble or disassemble the shielding can.
- 4) This disclosure fulfills blind installation method on mobile workstation system.
- 5) It provides an easy assembling and dismantling solution for rework to obtain high yield rate.
- 6) From financial perspective, the cost is going to reduce because the productivity keeps acceptable quality consistently.

Disclosed by Wen-Hung Wang, Harris Tsai, KT Wu and Tristan Wu, HP Inc.