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Archive – Poster Shaul Lupo

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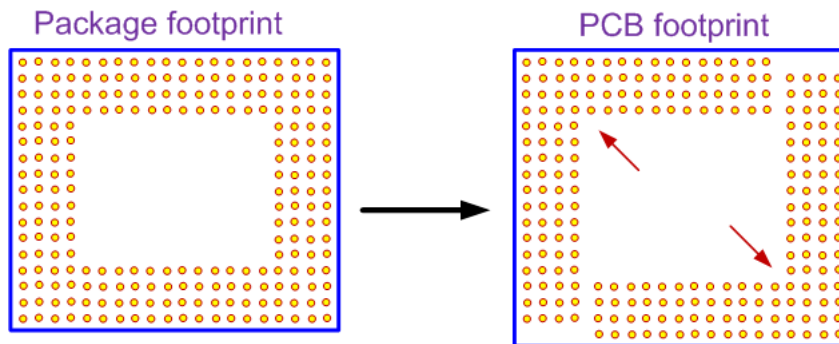
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HVM Solution for System Validation Board with OEM Socket

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Background

- OEM sockets used on system validation boards have low # of insertion/removal cycles compared to HVM socket (~1K VS. 100K)
- Existing HVM socket cannot be directly used on the validation board due to offset of contacts in the OEM socket (package foot-print and PCB foot-print do not match)

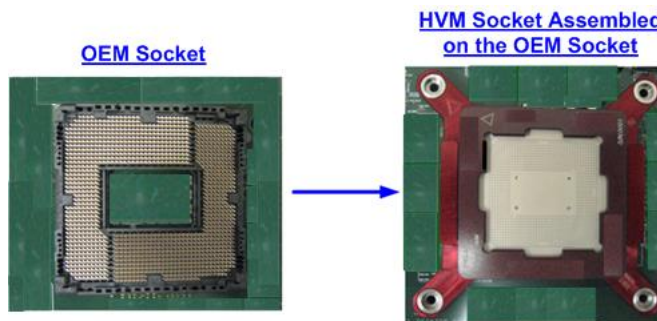


- In order to use HVM socket on system validation boards, user needs to remove the OEM socket from the board using reflow process
- This process is time consuming and also causes HVM socket connectivity and reliability issues due to solder residue on the pads

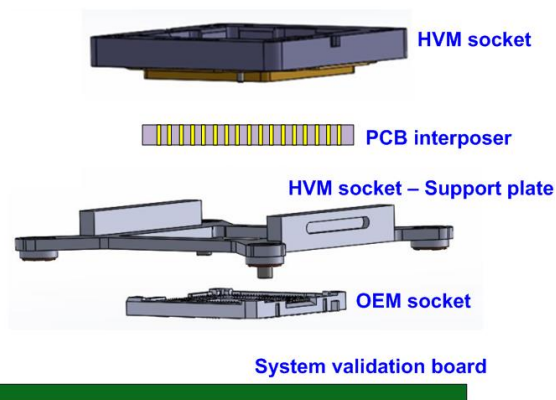
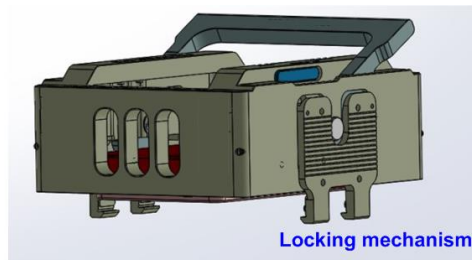
HVM = High Volume Manufacturing

Solution

- Use existing HVM socket with an additional PCB interposer placed directly on the OEM socket



Stack up



Advantages:

- Increase # of insertion/removal cycles significantly without any system validation board modifications
- This concept can be applied for boards with different footprints where package and PCB foot-prints do not match
- Provides flexibility to the user. User can use either OEM or HVM socket without any board rework
- Robust connection of the HVM socket Vs. assembling it on the PCB directly
- Allows reuse of existing HVM locking mechanism without designing new hardware

Current Status:

- This solution has been proven to work in real validation/test application

Next steps:

- Understand impact of additional height (interposer + pogo-pin contact) on signal integrity