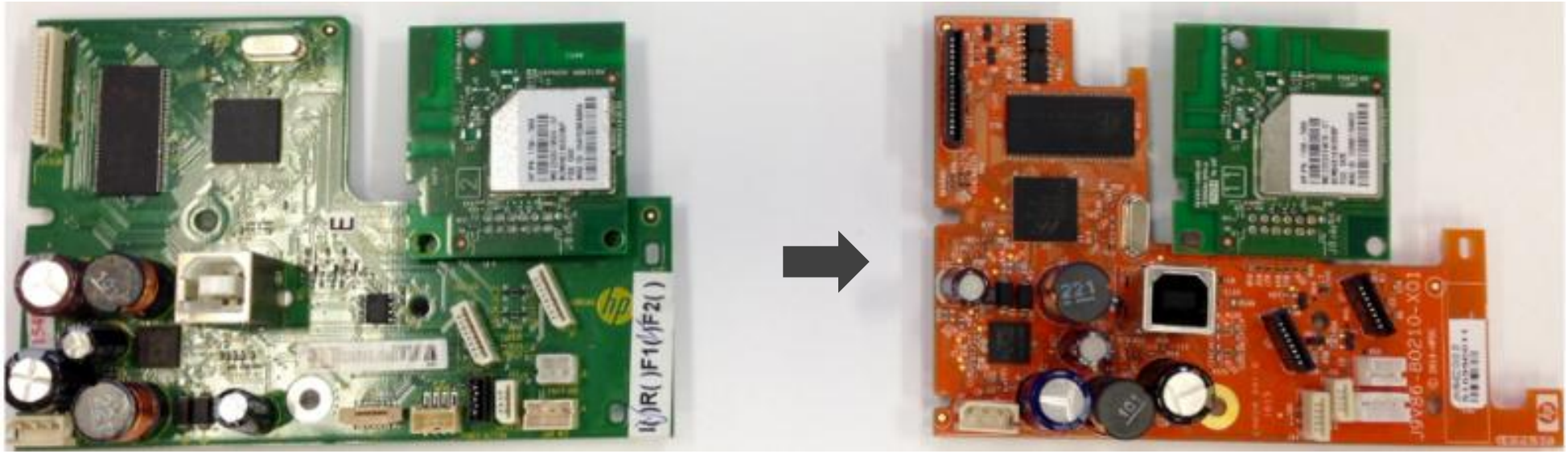
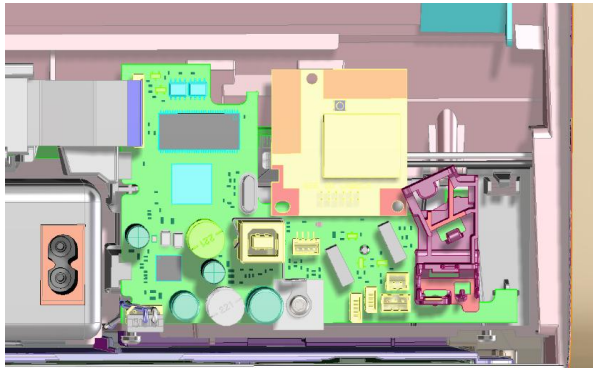
High Volume Product Logic PCA redesign to low cost | $1.6 M in savings



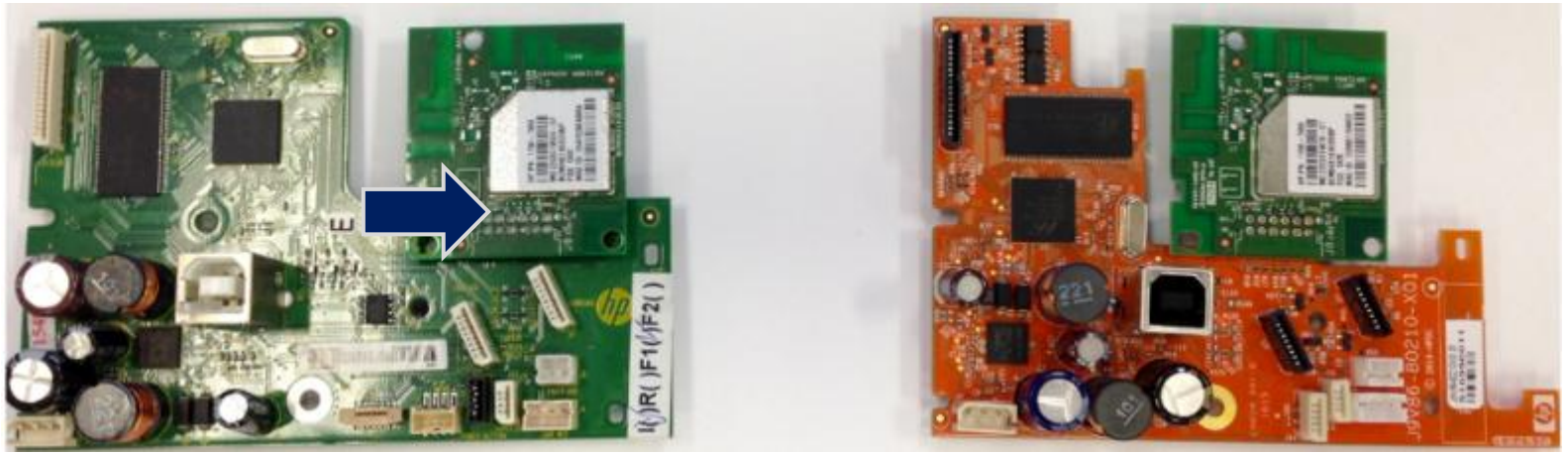
Original design Main Logic PCA

Cost reduced Design



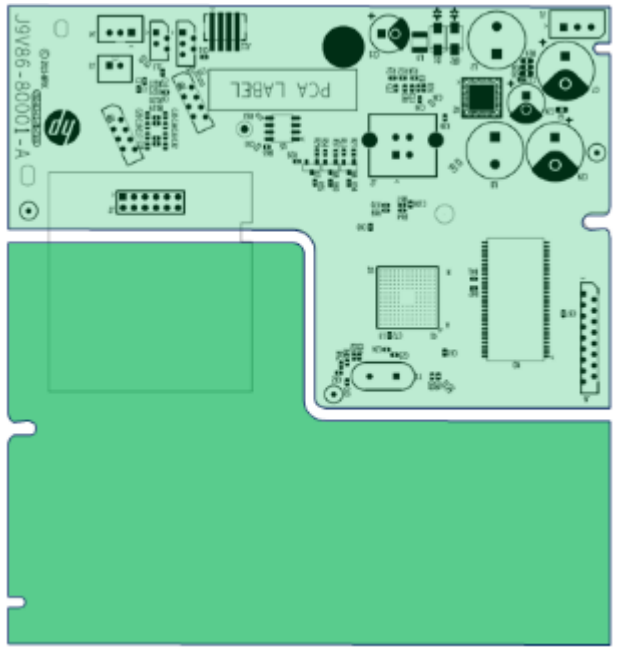
Thorough study with Mechanical engineering for cable routing , fire enclosure, final assembly with the reduced cost board

Main PCB 23% size shrink re-design saves $0.21/unit

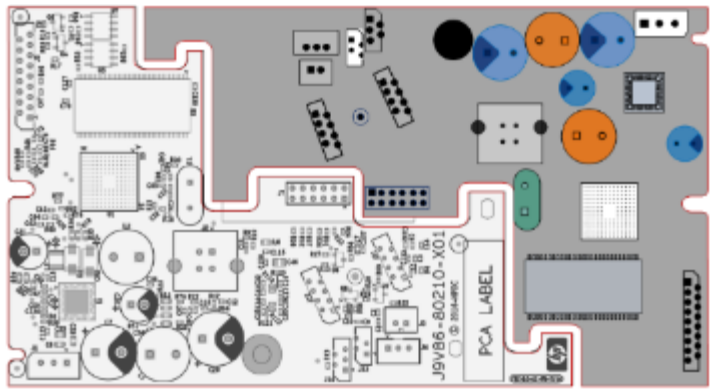


Original Main PCA $0.80/ PCB

Redesign PCB new cost estimate $0.59/PCB

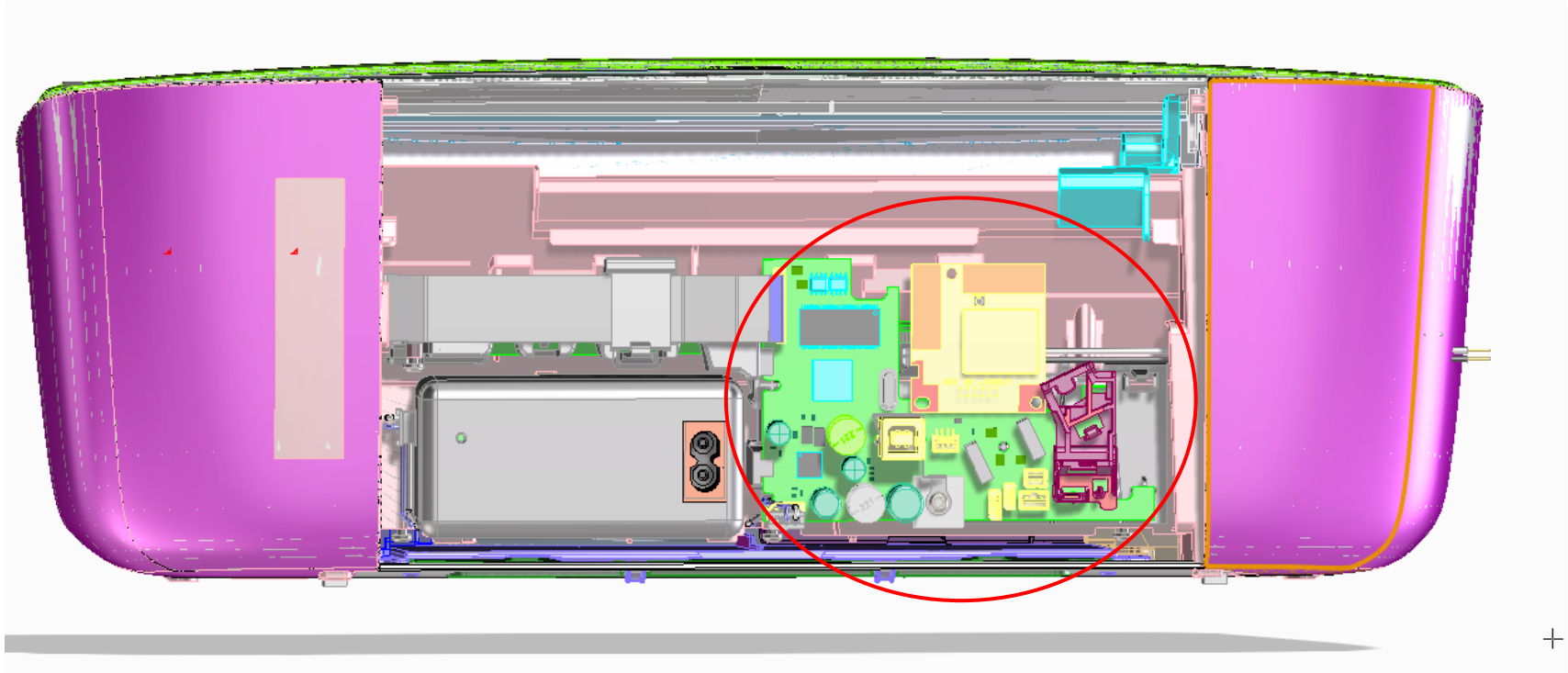


Improved nesting on Panel

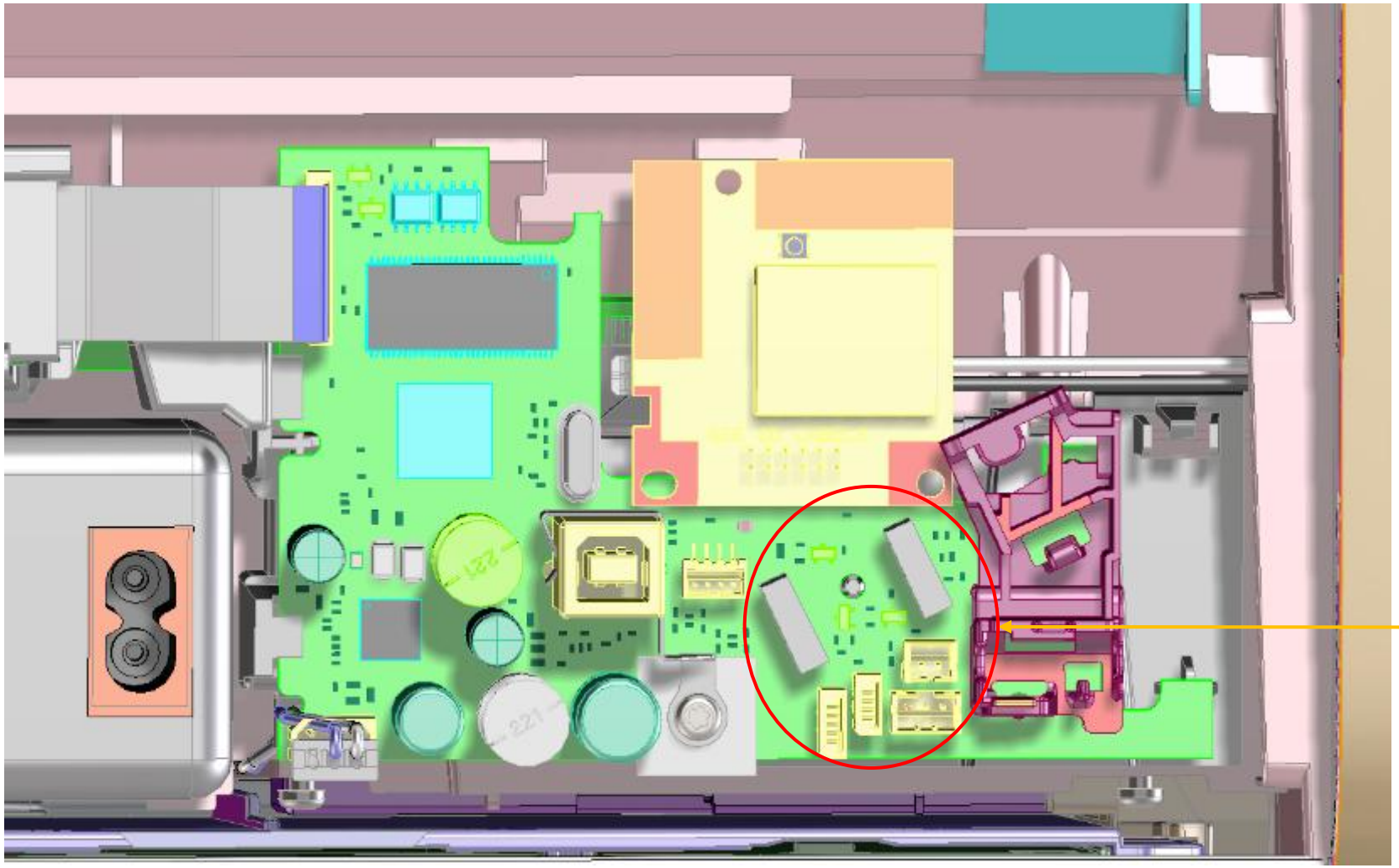


Trays Removed

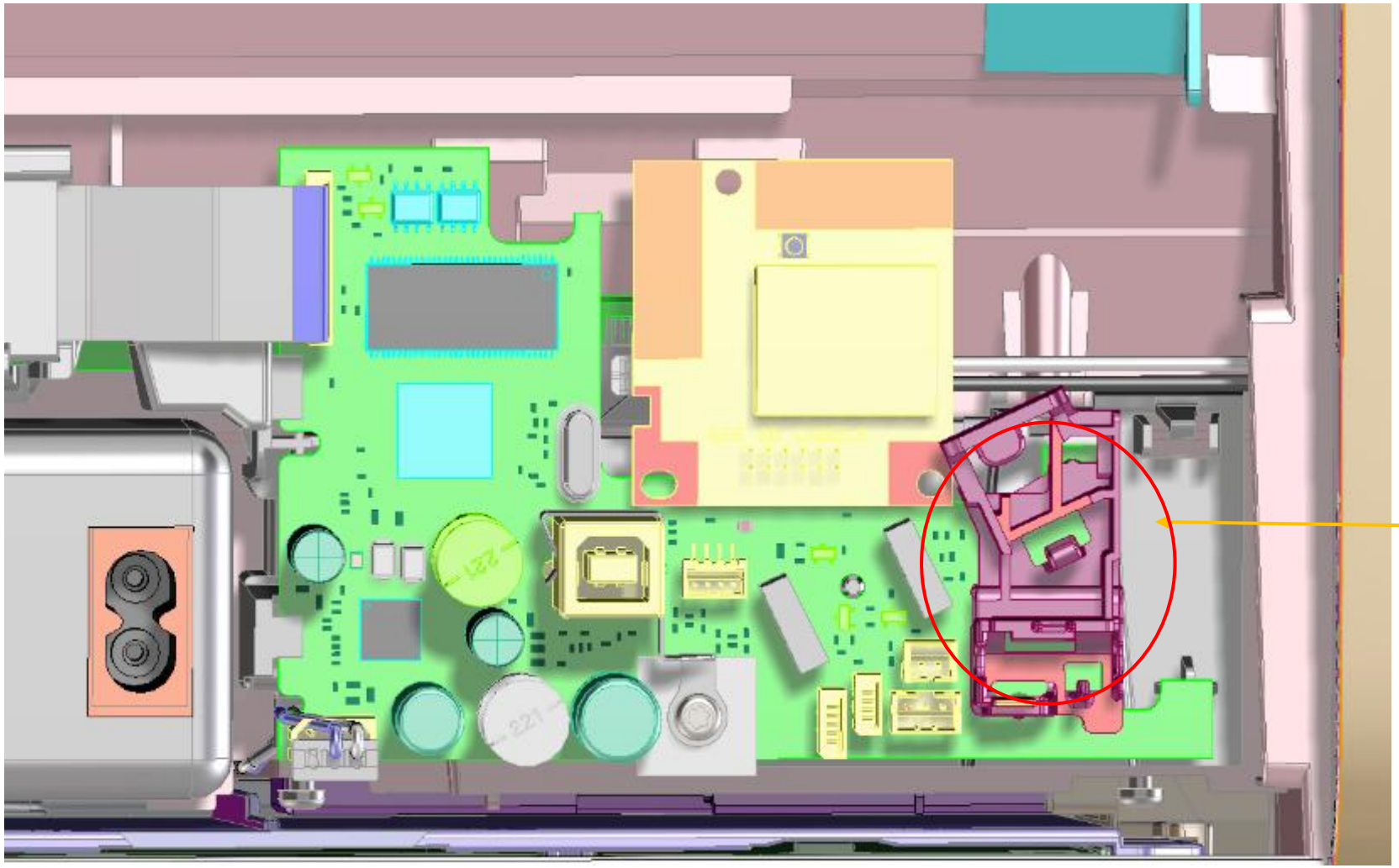
Power Cover Removed



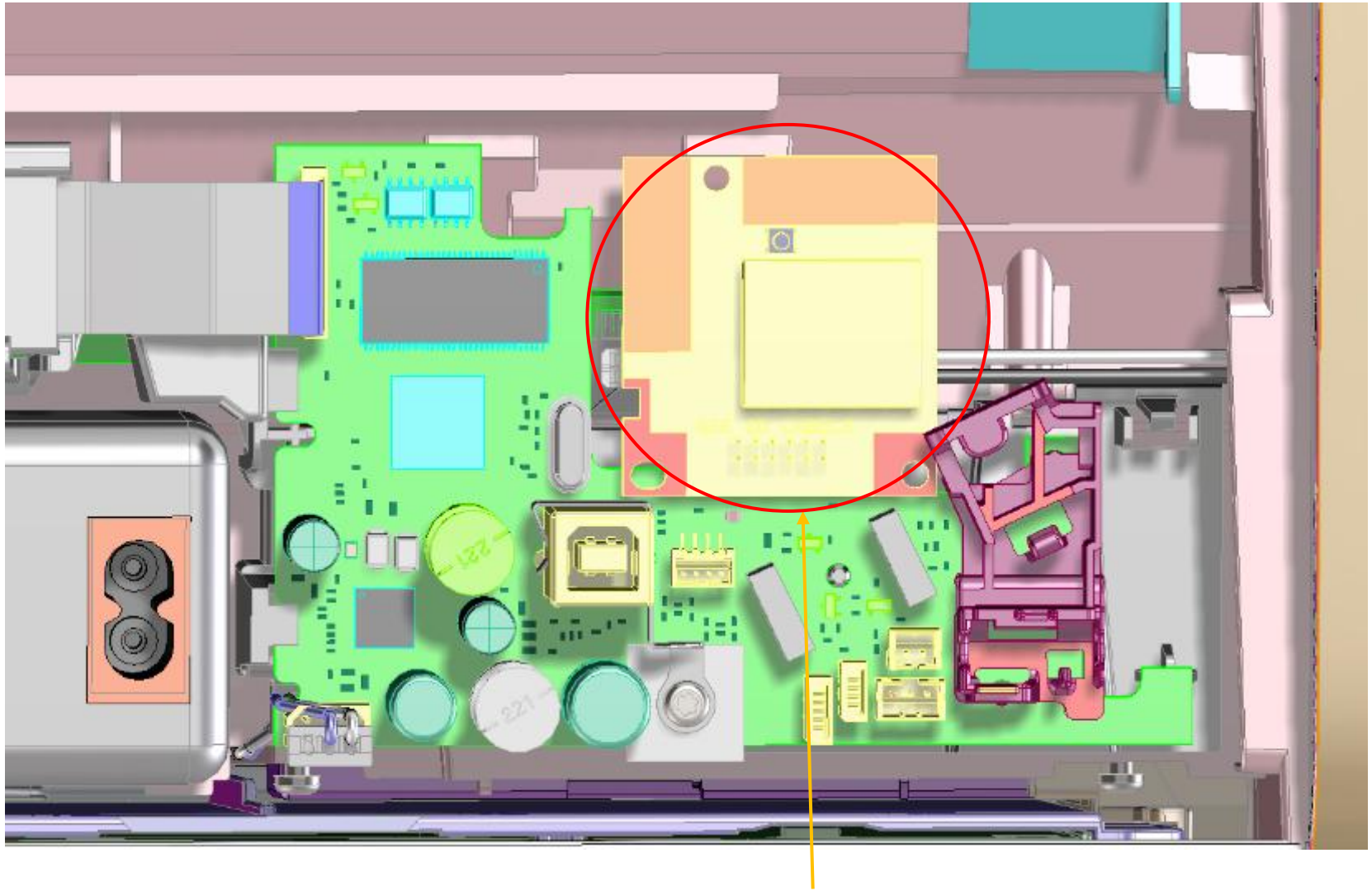
Changes from Previous Board



Connectors and Cabling Shifted Left (Cables & Ground Strap not Shown)



Ferrite Clip Shifted Left
(Ferrite not shown)

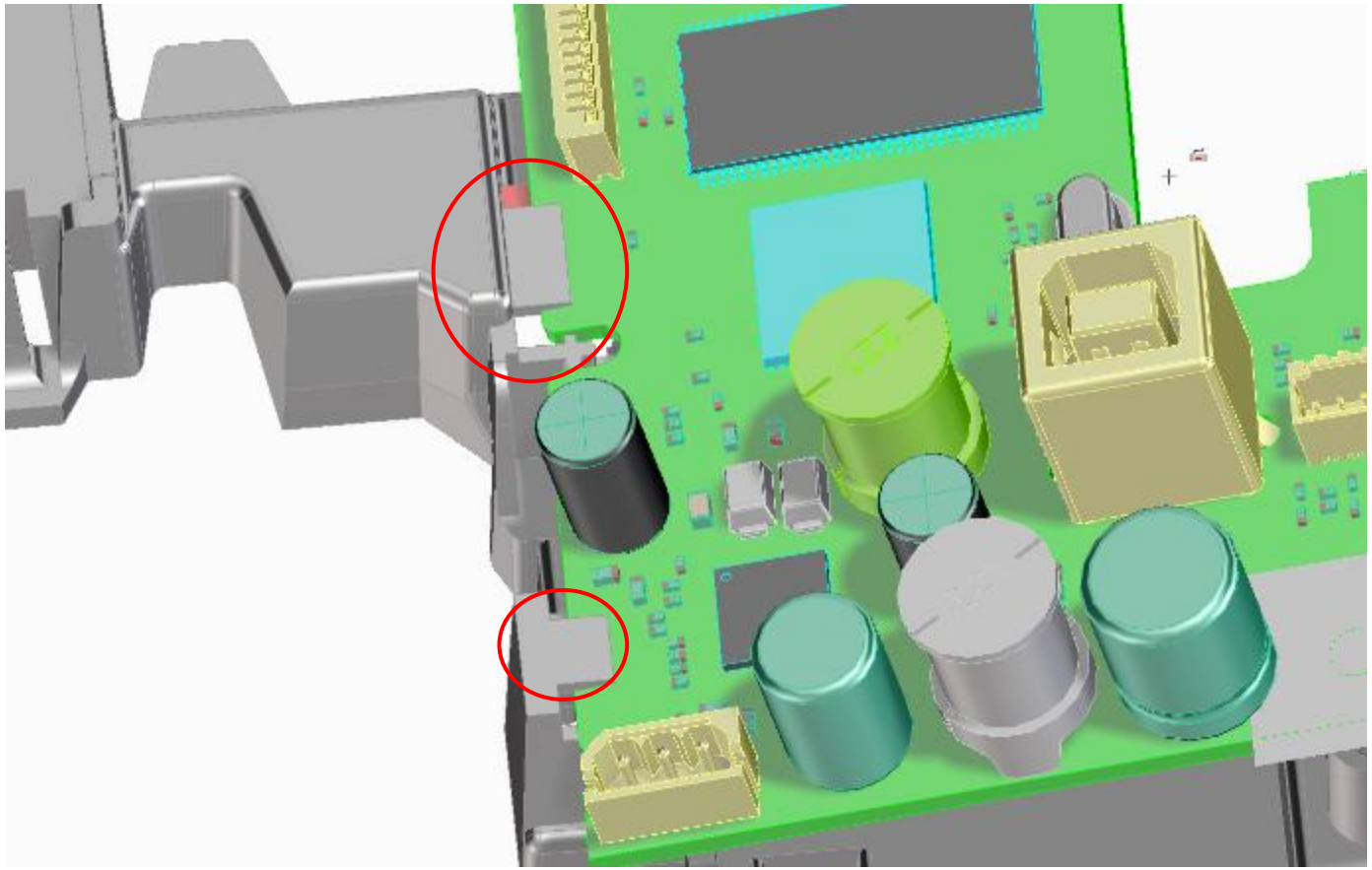


Wifi Card Shifted Up

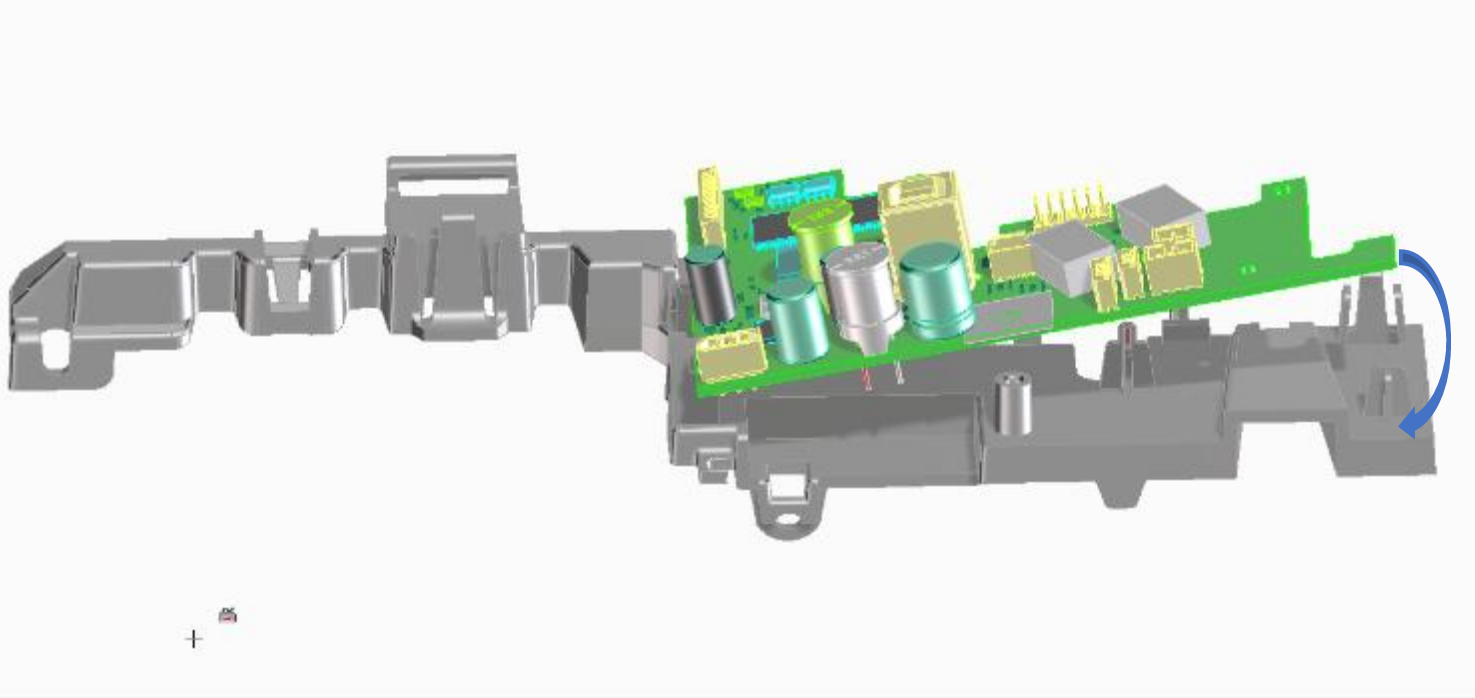
Power
Shifted Left

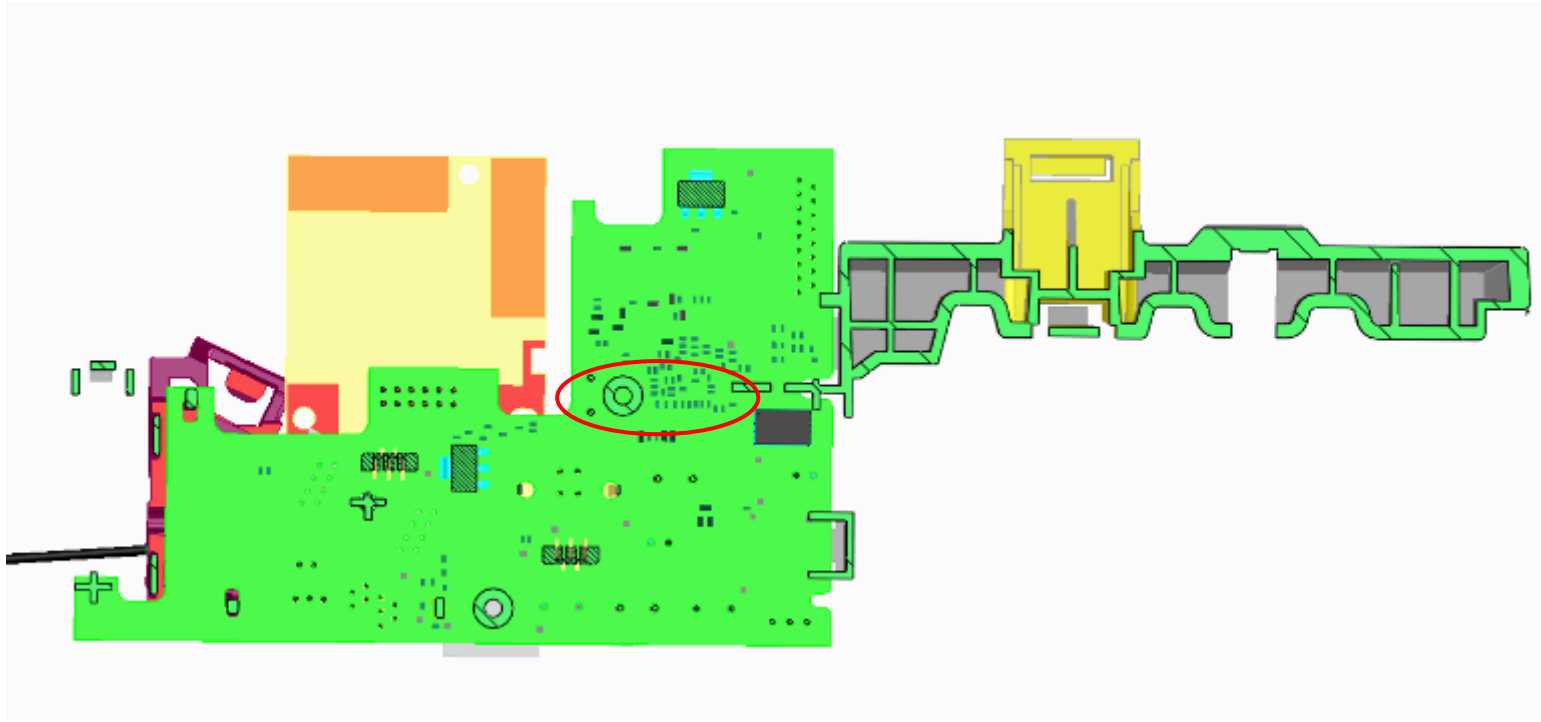
Assembly

MPCA Insertion Guides



Board Rocks into Position

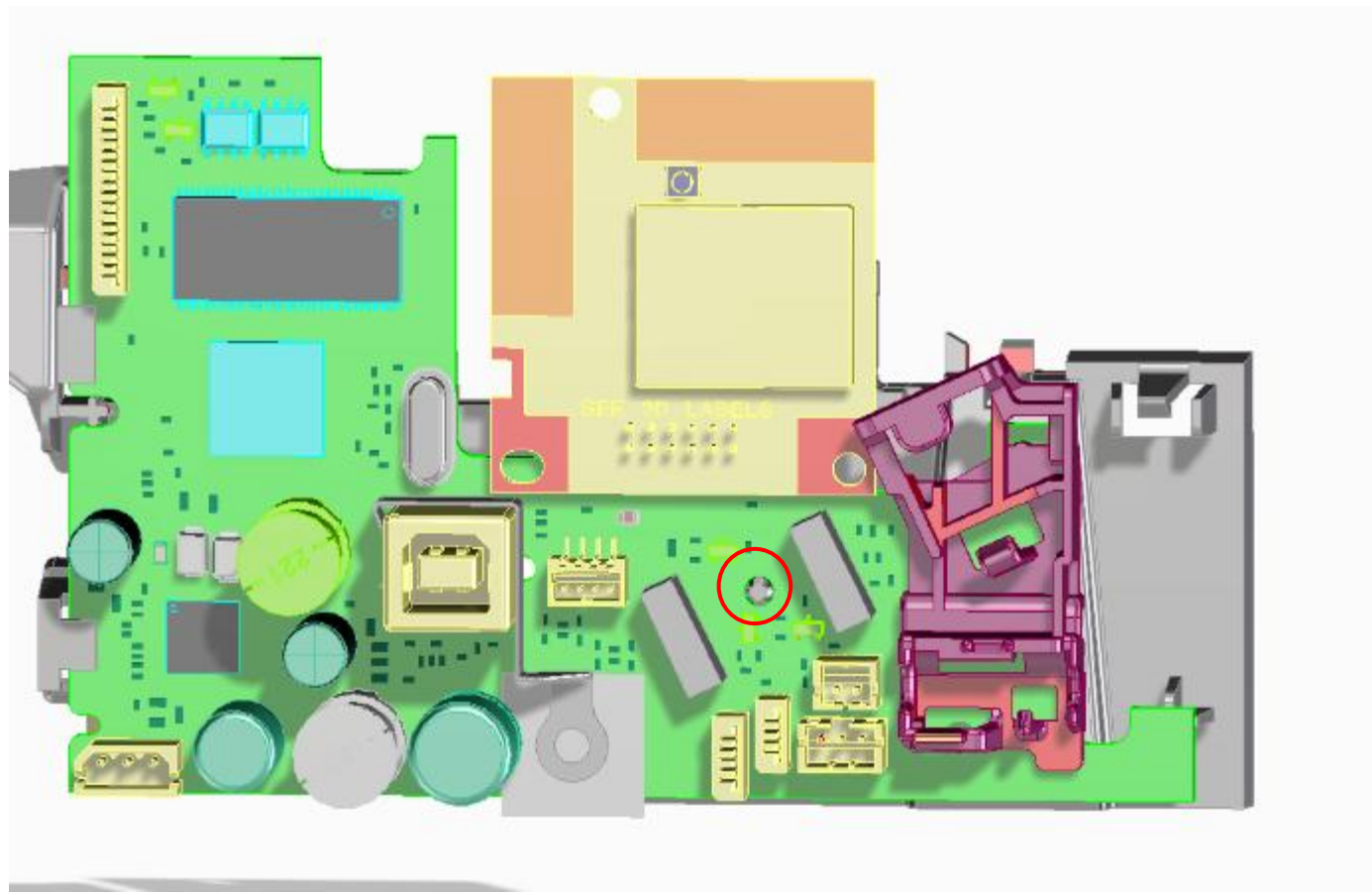


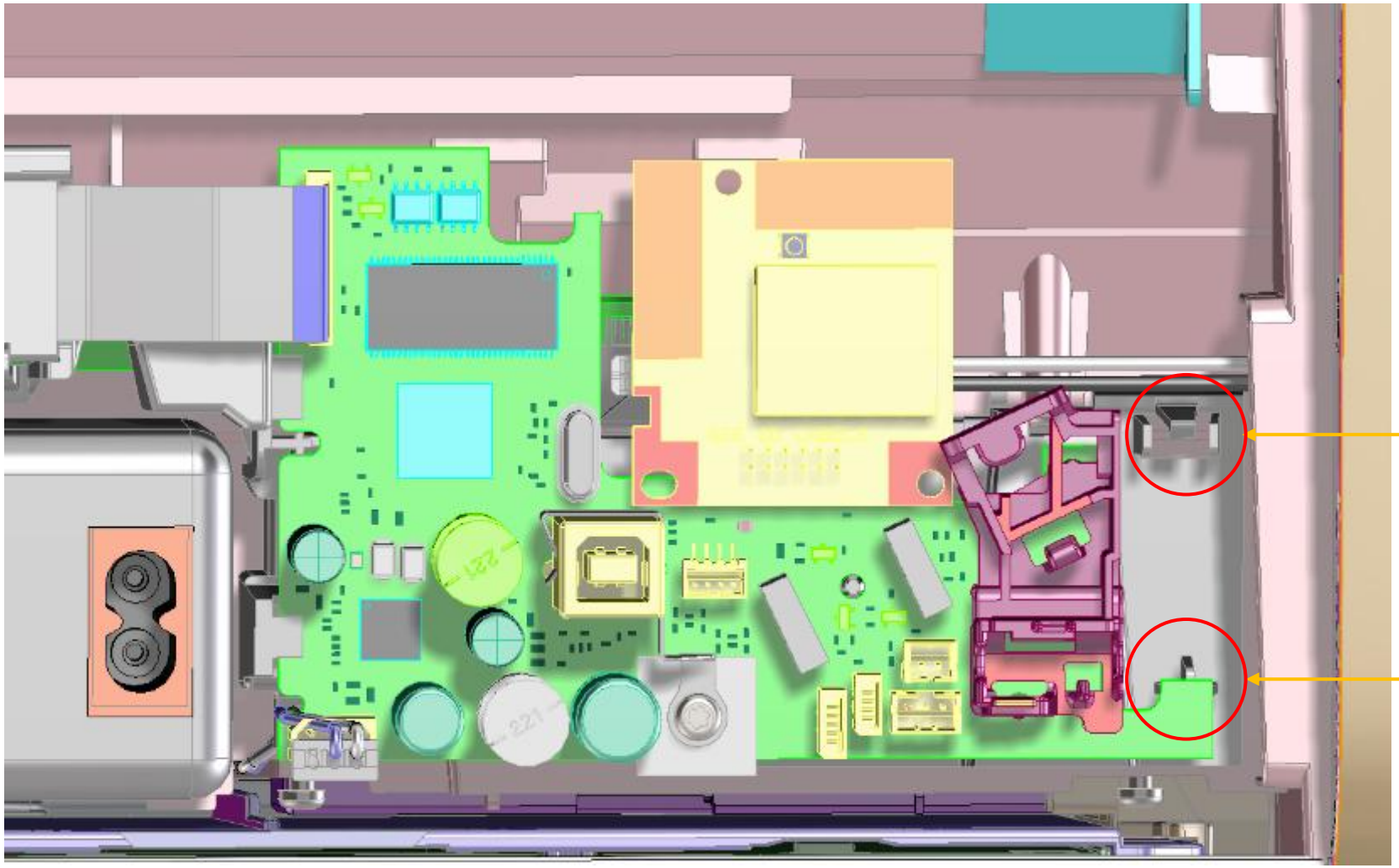


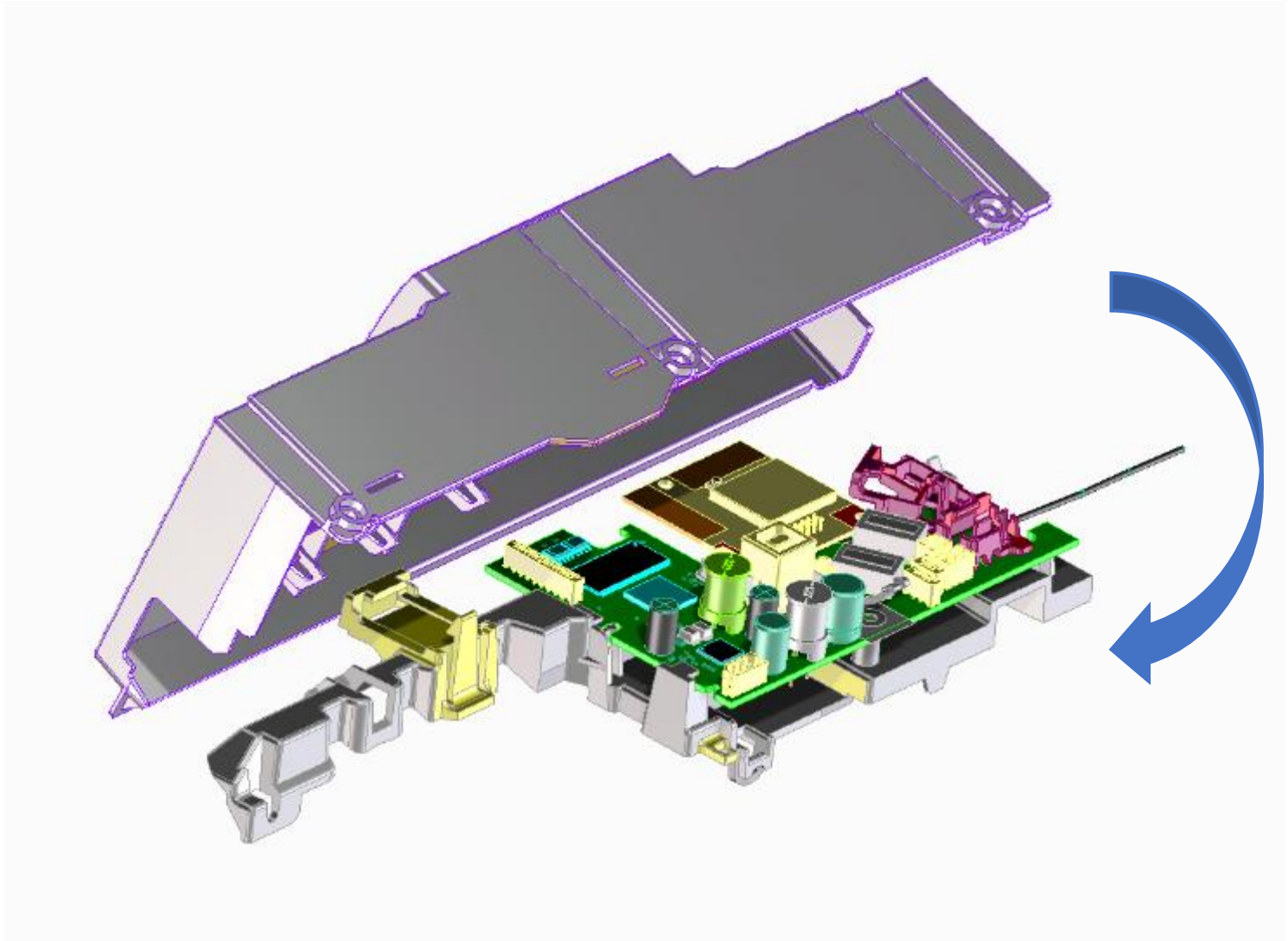
Trace View of Back
of MPCA

CAUTION:
Do not Damage
Components on
Back by Sliding
Left and Right

Insert into MPCA Centering Post




Clip No Longer Used
Board Rests on Post



Power Cover Rocks into Place

Wifi Card and Board Need to
Clear Cover on Assembly

CAUTION:
Board Should
not Rub on
Assembly