

Swan_soundbar_DVT_MIC_Soldeirng



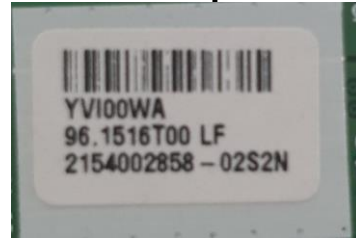
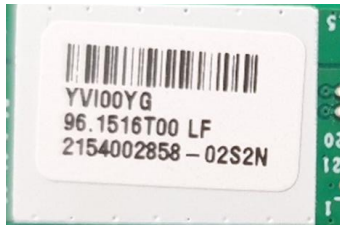
ALT Co., Ltd.

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Ver.1.0

Issued by SH, SON

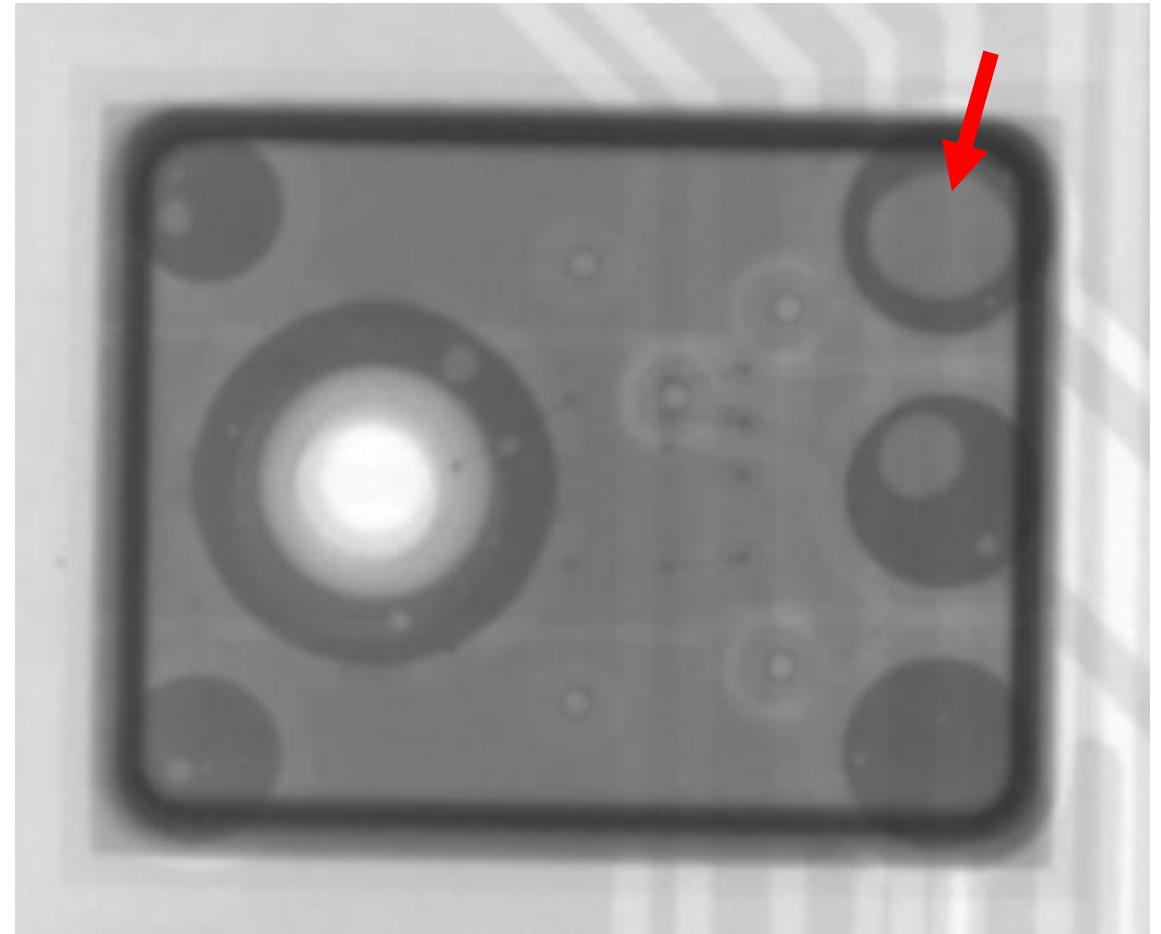
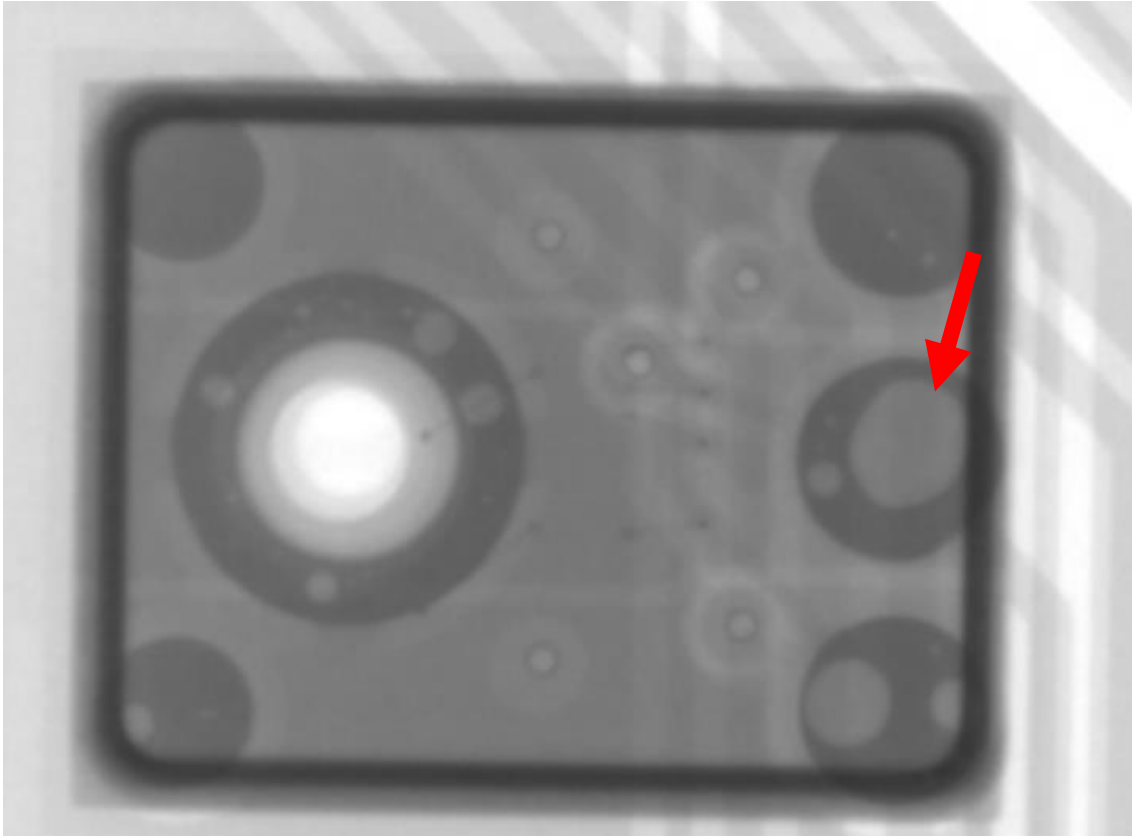
- X-ray inspection for DVT3 MIC PCBA
 - Q'ty : randomly select 2pcs



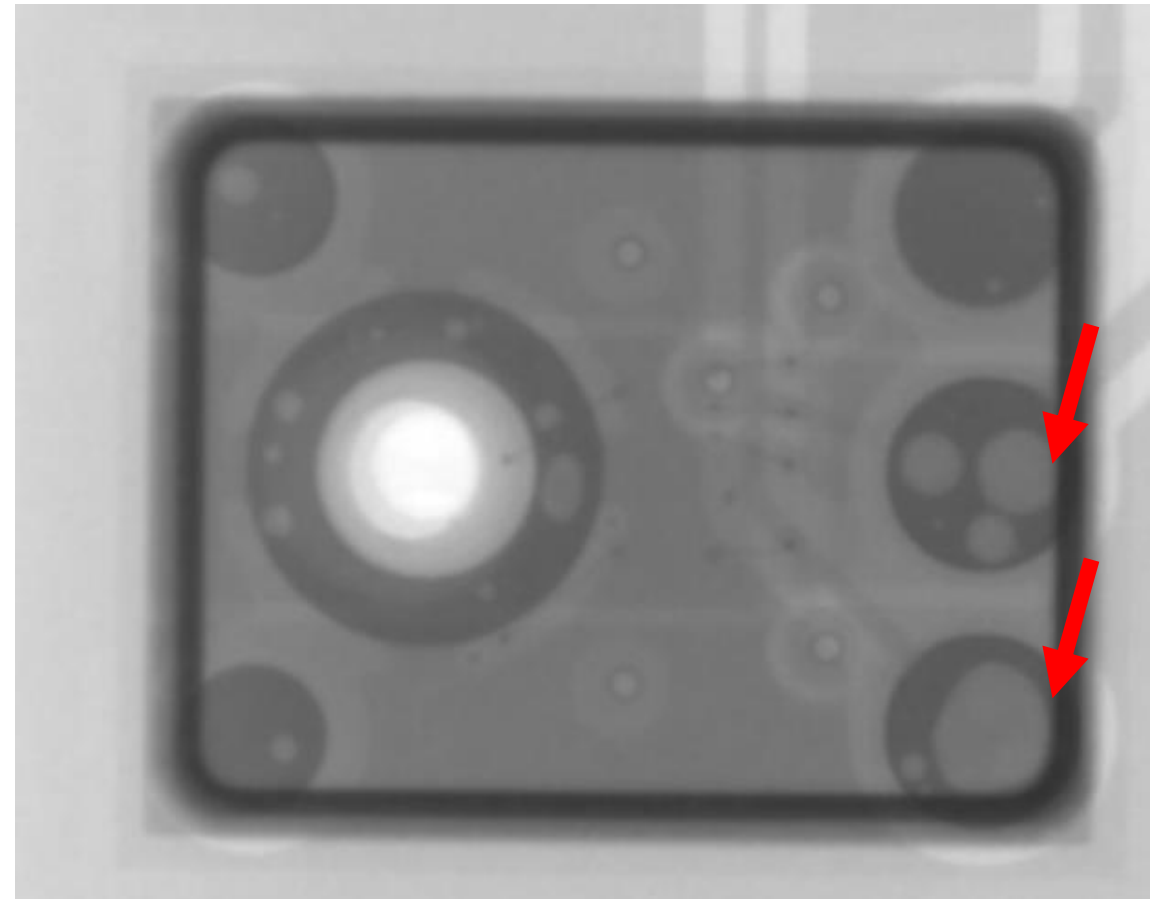
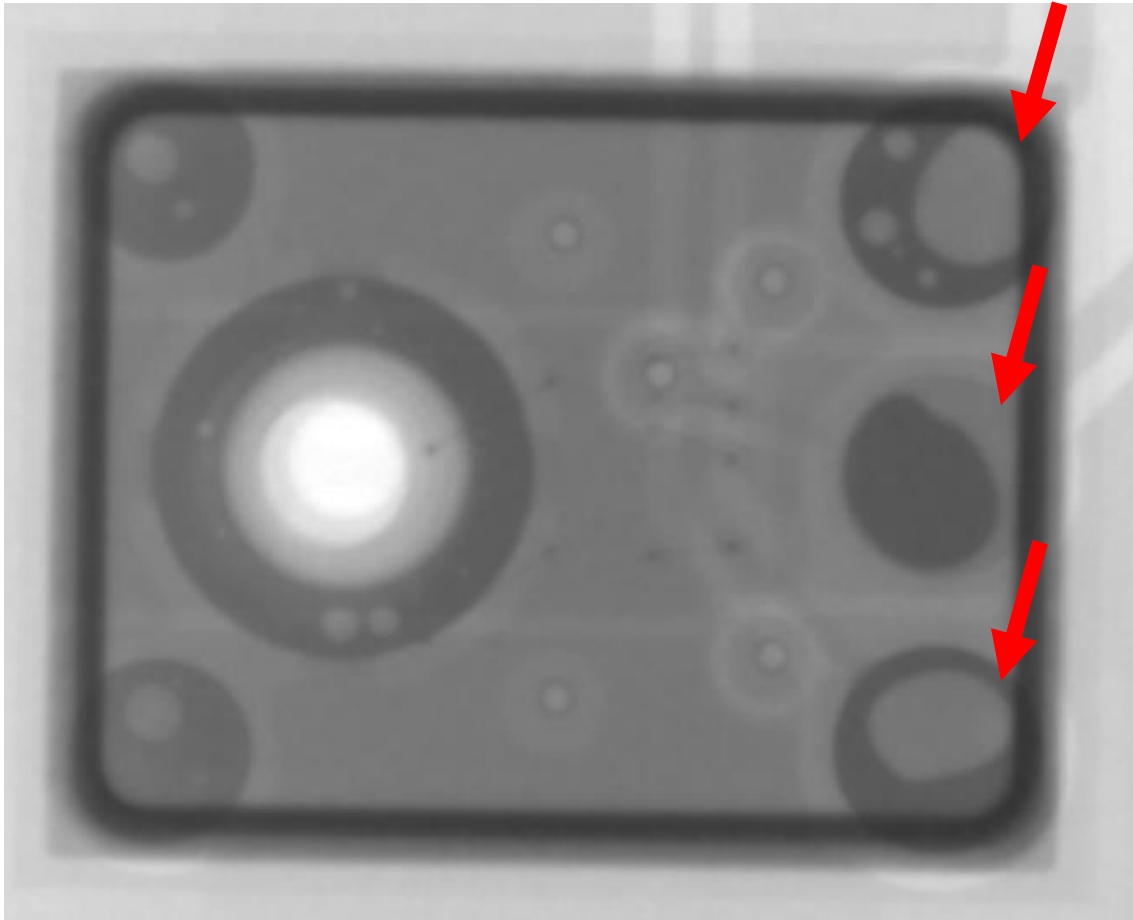
- One of MICs on MIC PCBA signal pin soldering condition is NG
 - The bga void is larger than 25% over.
- This void is making a negative effect on the reliability of the board
 - In particular, soundbar vibration adversely affects reliability of MIC function.
- ALT will follow IPC-A-610 standard.
 - ALT will add the special inspection item for Mic soldering conditions on manufacturing specification of SWAN
 - Fii manufactured MIC pcba was problematic with each build.

- Factory Action item (210403)
 - report the optimum soldering conditions for MIC PCBA
 - i.g. Metal mask(stencil), Screen printer, reflow profile,, etc
 - Report the test and validation plan for MIC soldering conditions
 - O-ring, solder balls, Void, etc..
- Factory Action item (210811)
 - The improvement plan was submitted, but as a result, no improvement was made.
 - ALT is not agree this defected soldering quality for mass production
 - FII should be submit the validation report before mass production.

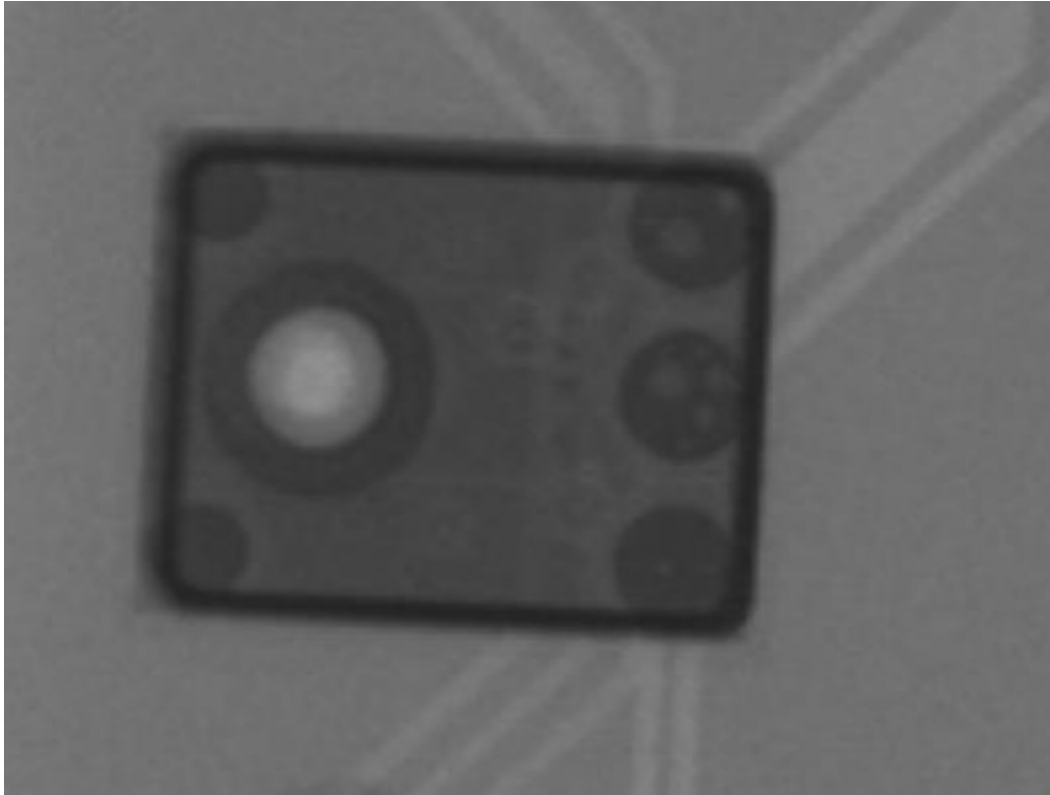
- X-ray image – DVT3 MIC PCBA
 - NG



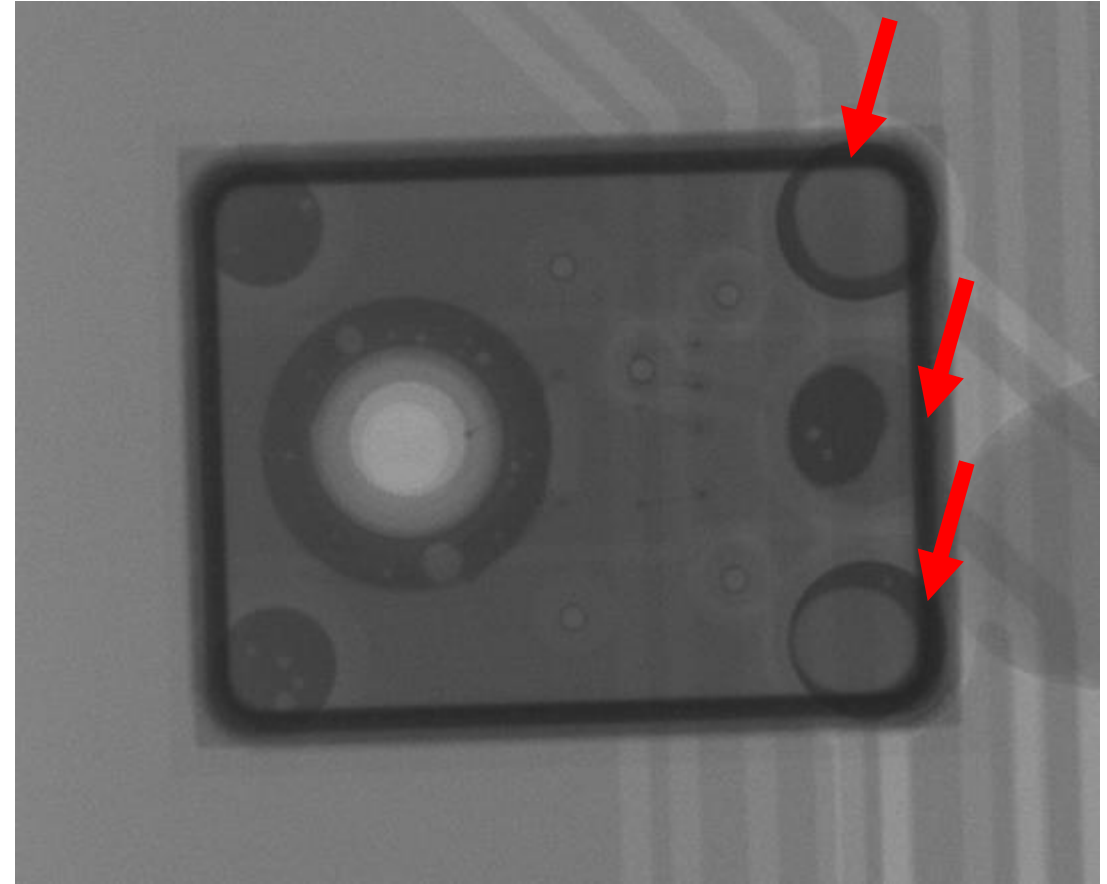
- X-ray image – DVT3 MIC PCBA
 - NG

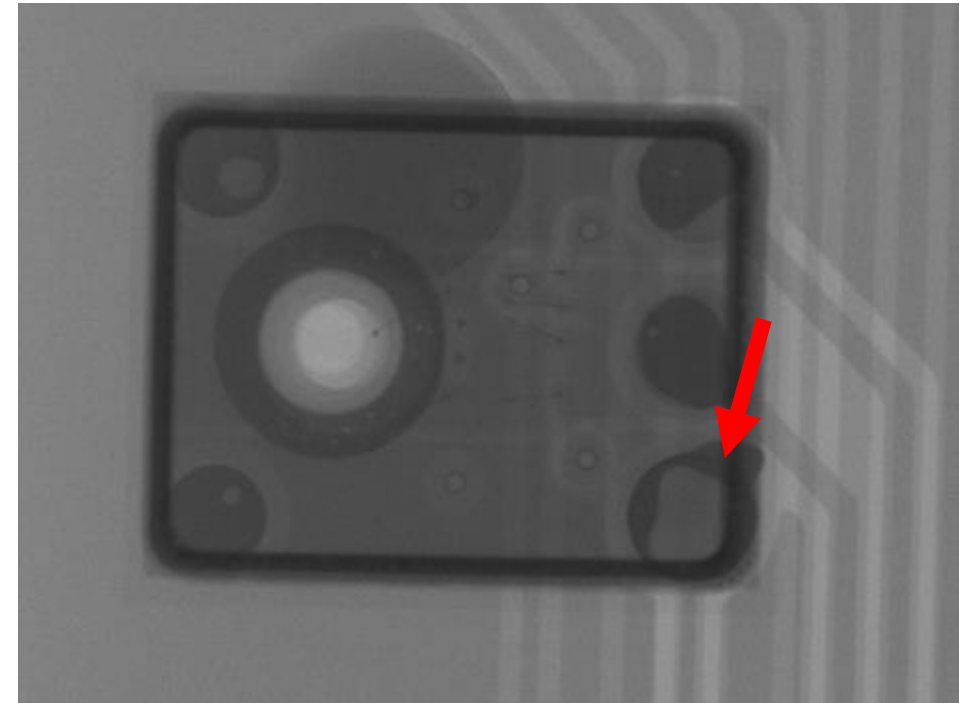
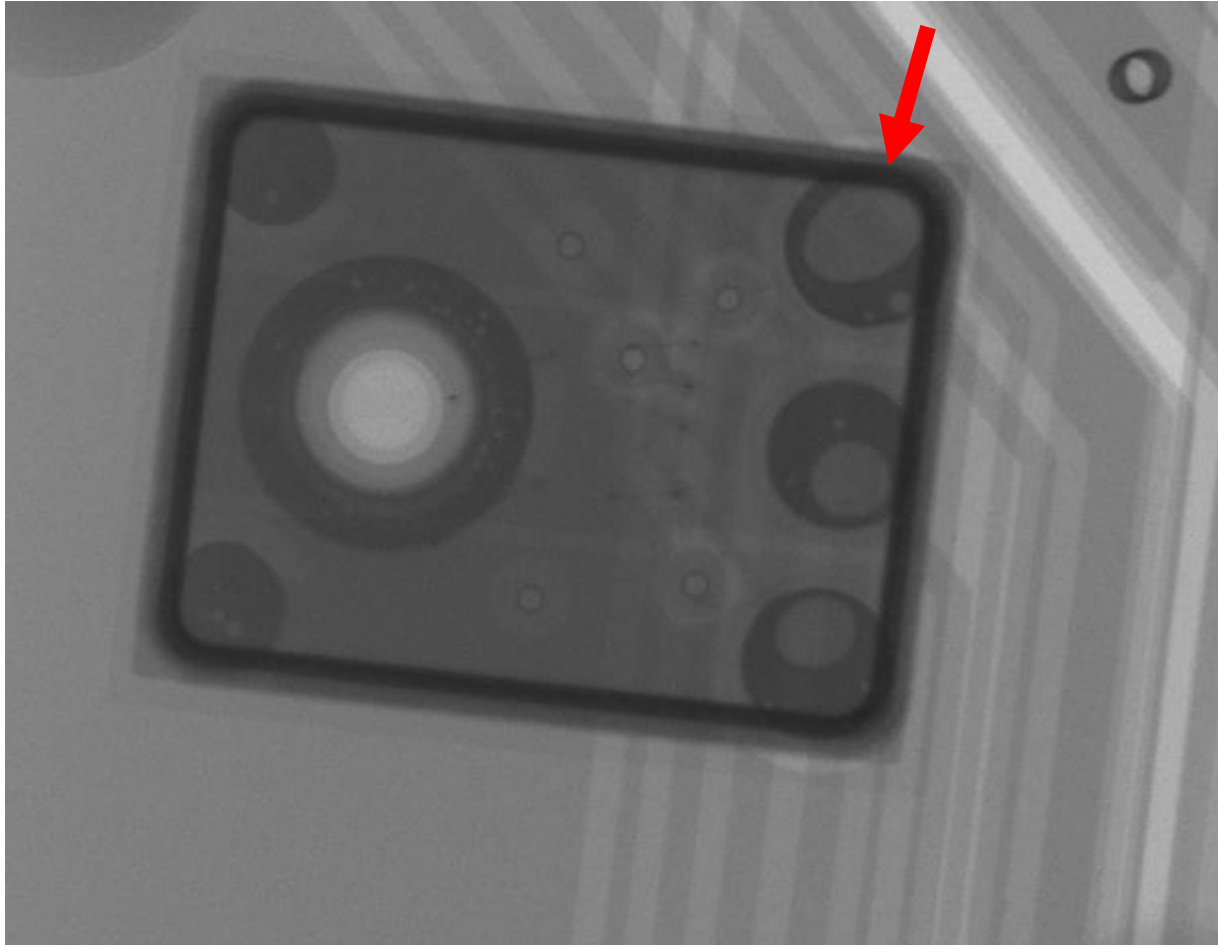


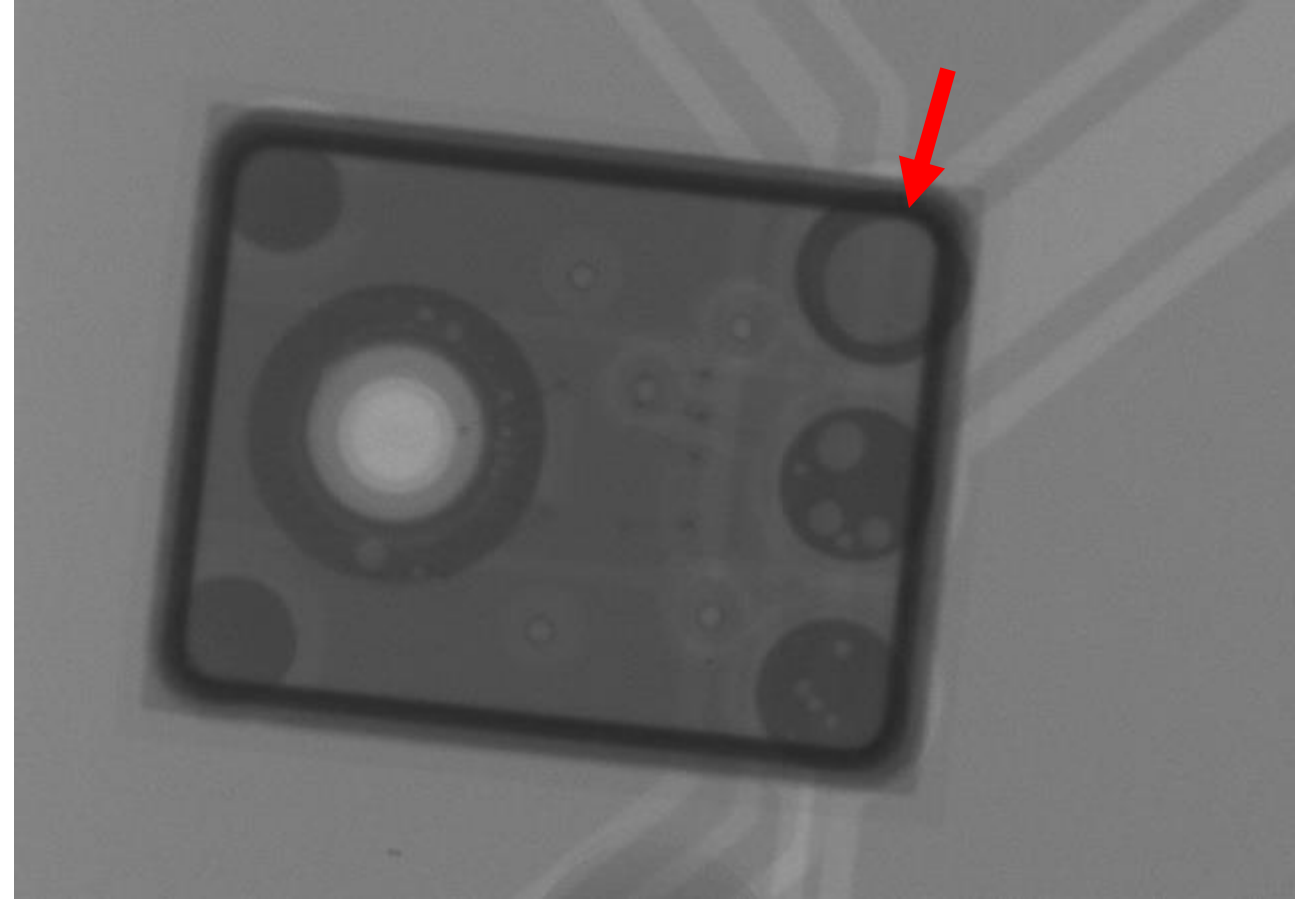
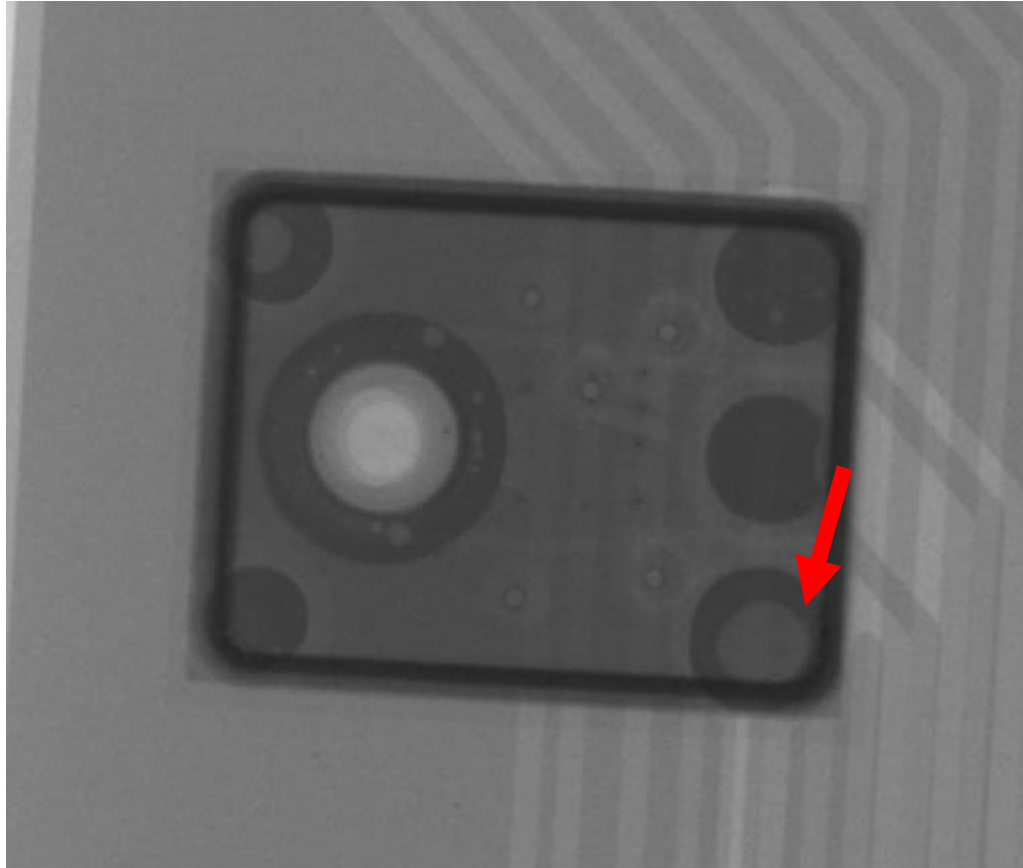
- X-ray image
 - Good



NG







Appendix. IPC-A-610 8.2.12.4 Surface Mount Area Array – Voids

8 Surface Mount Assemblies

8.2.12.4 Surface Mount Area Array – Voids

Design induced voids, e.g., microvia in land, are excluded from this criteria. In such cases acceptance criteria will need to be established between the manufacturer and user.

Manufacturers may use test or analysis to develop alternate acceptance criteria for voiding that consider the end-use environment.

Acceptable - Class 1,2,3

- 25% or less voiding of the ball x-ray image area.

Defect - Class 1,2,3

- More than 25% voiding in the ball x-ray image area.

- End of Documents