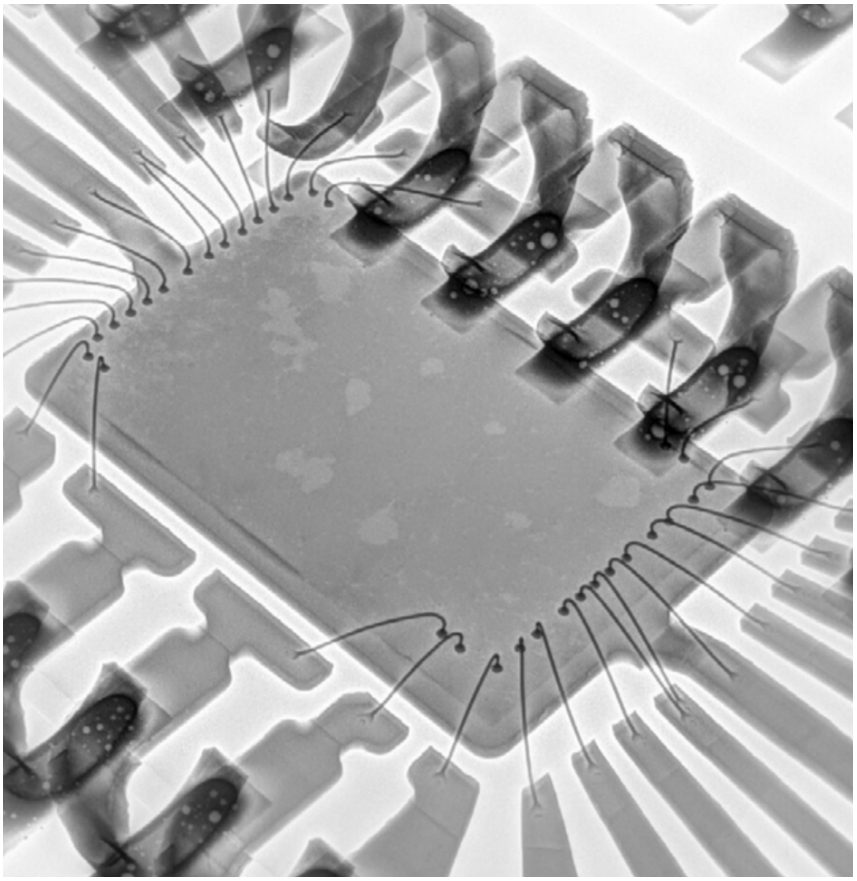
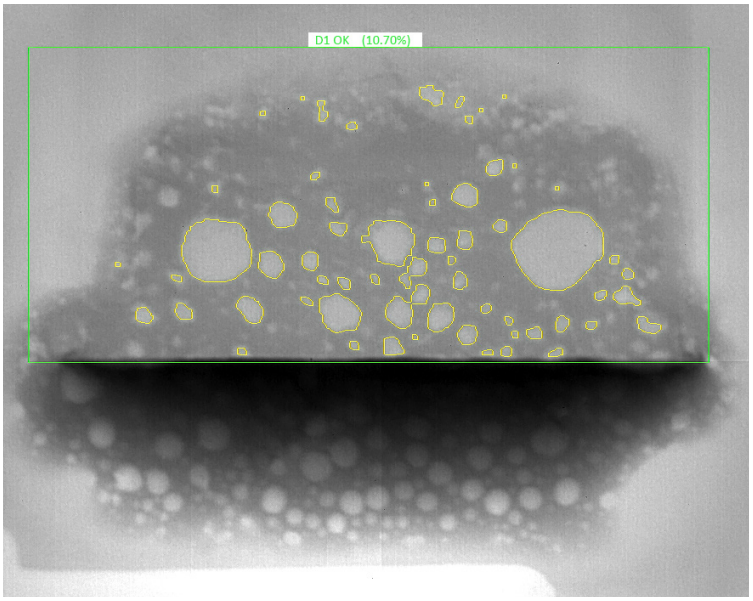
Analysis of the soldered joints

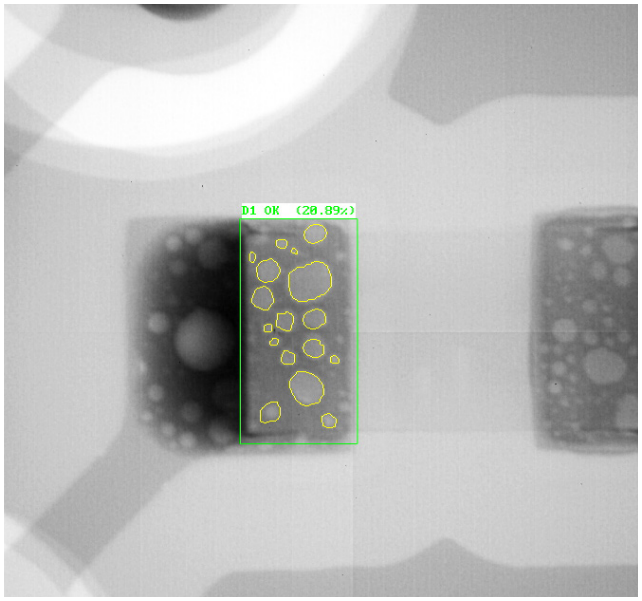
This analysis is performed on Microme|x microfocus X-ray inspection system.



Microme|x is designed especially for inspection of complicated printed circuit board and SMT (Surface Mount Technology) assemblies. A high resolution is achieved thanks to the open X-ray tube. The inner arrangement guarantees unbeatable magnification that enables to inspect soldered printed circuit boards or even microcracks in the balls of BGA (Ball Grid Array). Maximal available voltage180 kV allows also for inspection of challenging assemblies with coolers or metal cases mounted.

X-ray images are post-processed by unique software tools for local contrast enhancement in order to reveal material defects. The software also allows quantifying porosity in the soldered joints. Inspection of bigger amount of identical samples can be partially automated for NOK/OK samples sorting.





Example of evaluation of the porosity of a soldered joint from an X-ray image. The analyzed area is bordered in green. Defects found are shown in yellow. The value in the white box shows the percentage of defects in the analyzed area.

Watch video.

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