

# X-Ray Electronics Inspection

## A Service from NSS Failure Analysis Lab

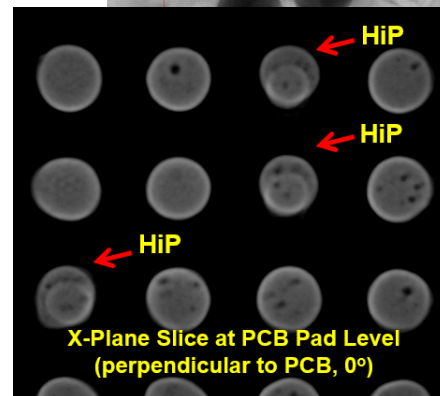
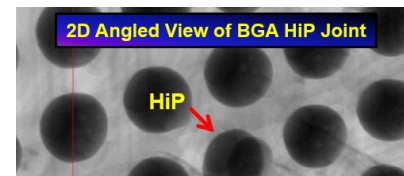
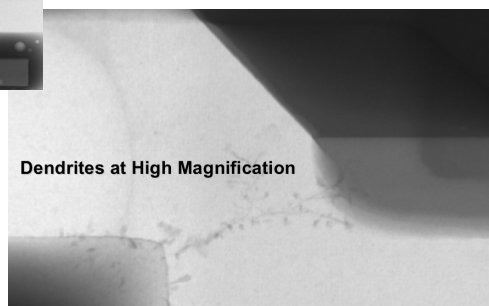
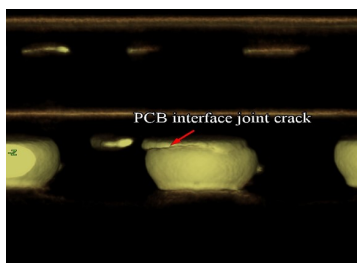
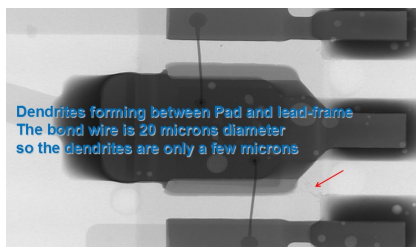
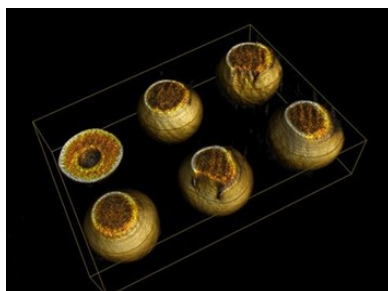
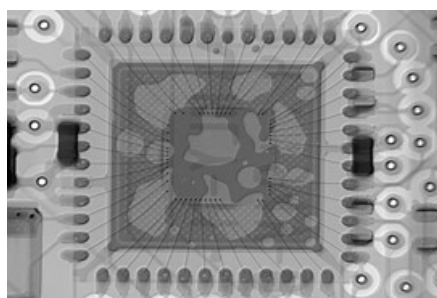
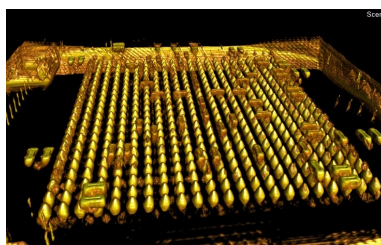
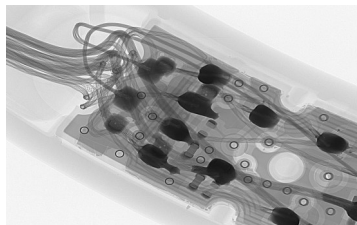
### Industry Challenges

- During manufacturing process, parts, connections and boards need to be verified to ensure proper assembly, functionality and high quality.
- Problems of intermittent failures start appearing in electronics products after entry into service.
- Detecting the root cause of these failures can be costly and time consuming, and may not always yield to any deterministic results.

### Our Solution

- Advanced automatic 2D & 3D Xray inspections to significantly help detect defects in a non-destructive, non-intrusive way.
- X-ray inspection to reveal defects, whether hidden or visible, including open or shorted solder joints, lifted leads, voids, and unacceptable size variations in solder bumps (as in BGA components).

With our state-of-the-art equipment, we can help you inspect your products from defects and identify the root cause of failures.



### Key features:

- Up to 160kV, 10W
- 360° imaging, up to 35,500X magnification
- 2D live digital X-ray with < 100nm feature recognition
- CT technique to create slices in any plane of a PWB/PCB assembly without the need to cut the board
- 3D CT X-ray (Rotary; max sample size ~ 5.9" x 5.3", max inspection area ~ 2.3" x 1.75")
- 3D CT X-ray (X-Plane; provides high magnification CT reconstruction of target areas of PWB/PCBs)
- 29" x 22.8" maximum board size
- Automated BGA Analysis

### About NSS, Inc.

Neeme Systems Solutions Inc. (NSS) is an Aircraft and Avionics Systems Development Engineering Services company. Our core competency is providing engineering services focused on critical aircraft systems development.

The X-Ray electronics inspection service is an integral part of NSS Failure Analysis Lab, which utilizes Thermal and X-Ray Imaging, Stress Cycling and Image Analysis to provide automated non-destructive, efficient and effective way to detect failures in avionics components.