

## X-ray Inspection in Any Plane Without Cutting the Board

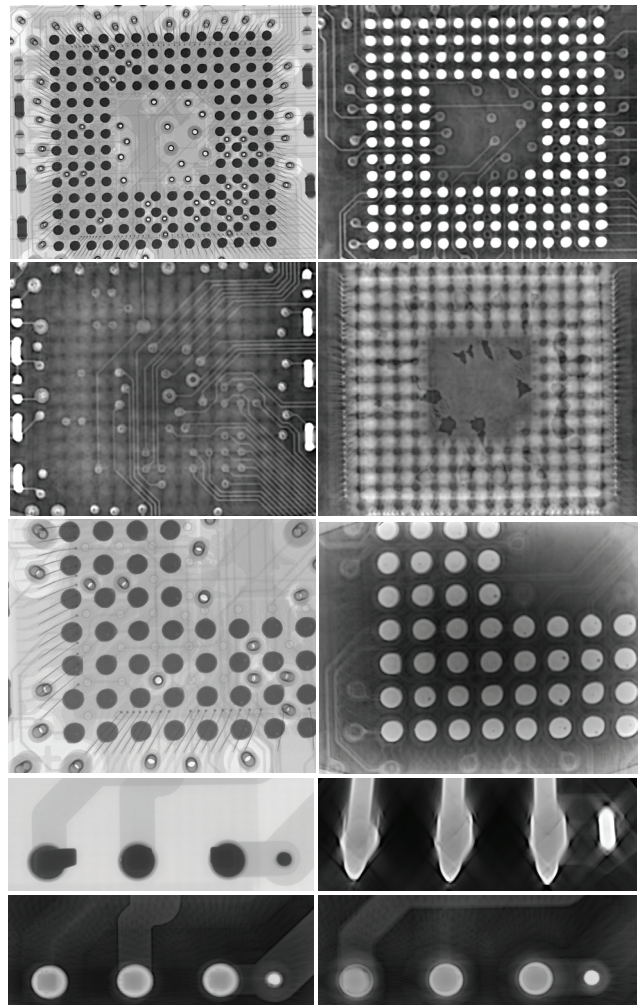


### Advantages

- View Individual 2D Slices within a Sample from Top-to-Bottom, Front-to-Back, Left-to-Right and Any Plane in Between
- Use Anywhere in an 18" x 16" (457 x 406 mm) Inspection Area
- No Need to Cut or Destroy the Board
- Works at High Magnifications
- Measure voiding and BGA solder ball size on image slices

### Applications

- Showing position and size of voids at joint interfaces and other locations within BGA, CSP, QFN, LGA, etc.
- Identifying Head on Pillow (HoP) and open joints
- Separating and inspecting the different layers within a Package on Package (PoP) or MCM
- Removing obscuring detail caused by side 2 features when needing to inspect side 1 components
- Investigating the quality and fill of thru-hole joints and vias
- Identifying tilted components and board warpage
- Analysing connectors
- Examining the tracks in individual board layers
- Making virtual micro-sections

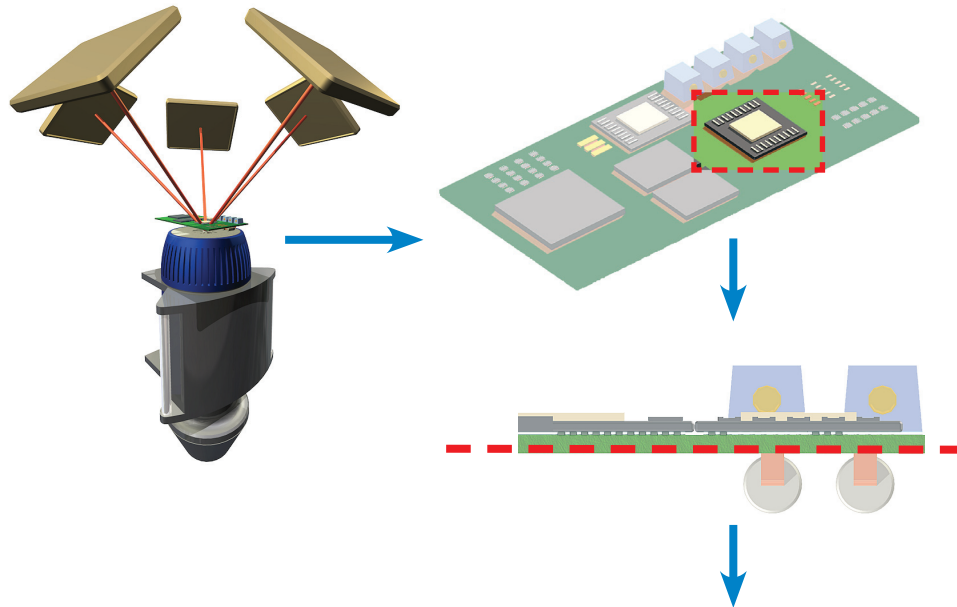


2D X-ray Images & X-Plane<sup>®</sup> Slices of a BGA on a Board and Thru-Hole Joints

Crystal Clear X-ray Inspection. Nordson DAGE.

# X-Plane<sup>®</sup>\* Analysis X-ray Inspection System Option

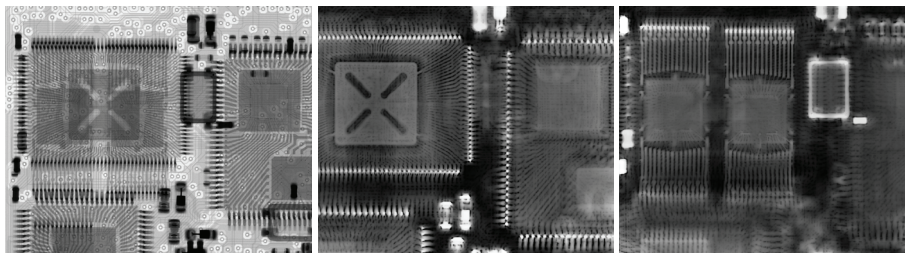
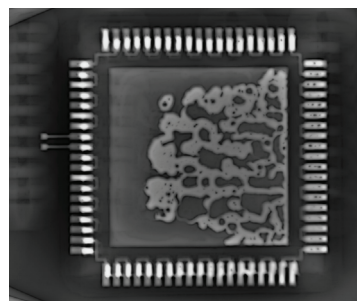
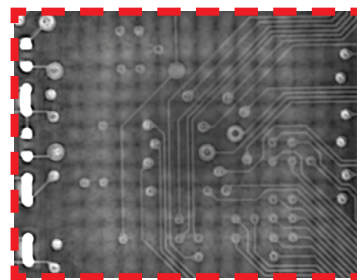
## Description



X-Plane<sup>®</sup> is quick, simple and easy to use. The board is placed in the Nordson DAGE X-ray inspection system and X-ray images are taken 360° around the region of interest. Once image acquisition is complete, proprietary, and patent applied for, tomosynthesis produces a detailed 3D model which can be sliced and analysed in any plane using the supplied X-Plane<sup>®</sup> Viewer.

X-Plane<sup>®</sup> uses the superior, sub-micron feature recognition 2D X-ray images, that Nordson DAGE X-ray systems always provide.

X-Plane<sup>®</sup> technology provides high resolution, high magnification CT functionality anywhere on the board - without cutting the board.



2D X-ray image of a double-sided board with X-Plane<sup>®</sup> slices showing the two sides separately

For more information, please contact your Nordson DAGE regional office or speak with your local Nordson DAGE representative, all of whom are listed on [www.nordsondage.com](http://www.nordsondage.com)

### Americas

+1 510 683 3930 **Phone**  
[sales@nordsondage.com](mailto:sales@nordsondage.com) **Email**

### China

+86 512 6665 2008 **Phone**  
[sales.ch@nordsondage.com](mailto:sales.ch@nordsondage.com) **Email**

### Germany

+49 7021 950690 **Phone**  
[sales.de@nordsondage.com](mailto:sales.de@nordsondage.com) **Email**

### Japan

+81 3 3599 5920 **Phone**  
[sales.jp@nordsondage.com](mailto:sales.jp@nordsondage.com) **Email**

### South East Asia

+65 6796 9500 **Phone**  
[sales.sg@nordsondage.com](mailto:sales.sg@nordsondage.com) **Email**

### Taiwan

+886 2 2902 1860 **Phone**  
[globalsales@nordsondage.com](mailto:globalsales@nordsondage.com) **Email**

### United Kingdom

+44 1296 317800 **Phone**  
[globalsales@nordsondage.com](mailto:globalsales@nordsondage.com) **Email**



**X-PLANE**

**Nordson DAGE**  
25 Faraday Road  
Rabans Lane Industrial Area  
Aylesbury, Buckinghamshire HP19 8RY, UK

+44 (0)1296 317800  
[www.nordsondage.com](http://www.nordsondage.com)  
Specification subject to change  
without notice e & oe

Copyright © Nordson DAGE 2014  
\* Patent Applied for  
DS-XR-XP-270618

**Nordson**  
DAGE