

Javad Experiences ViTrox's Advantages with Purchase of V810 Series2 XXL AXI System

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Javad EMS (JEMS) is located in the heart of Silicon Valley, San Jose, California. They serve the Electronic Manufacturing Services (EMS) industry specializing in supporting customers that have high complexity products and low to medium volume production requirements. In January 2011, JEMS purchased their first 3D In-line Advanced X-ray Inspection System (AXI), the V810 Standard from ViTrox. Javad EMS prides itself on quality, from equipment to processes, employees and finished products. Javad EMS has seamlessly continued its commitment to X-Ray Inspection. All these reasons coupled with the great performance of the V810 Standard lead Javad to purchase their second AXI System from ViTrox, this time choosing the newly released V810 Series2 XXL in May 2014.



Javad EMS has four continuous flow SMT lines complete with inline **3D AXI inspection**, 3D solder paste inspection and AOI. These lines are highly flexible allowing for diverse and complex products utilizing the latest in component packaging technologies to be assembled and with quick changeover between products enabling high mix, low to medium volume production.

ViTrox's AXI System, the **V810 Series2 XXL**, has proven to be the leading AXI solution for SMT Line implementation. The **V810 Series2 XXL** is capable of inspecting boards up to 26" x 38". This XXL format AXI system allows Javad to inspect respective large board sizes in comparison with the **Standard V810**, which has a maximum board size of 18" x 24". The **V810 Series2 XXL** offers Best in Class board thickness capabilities supporting boards up to 500mils thick with board weight of up to 15kgs. The **V810 Series2 XXL's** state-of-the-art inspection technology is made possible by Digital Tomosynthesis methodology running on a new Windows 8 Professional 64bit platform. Proprietary Hybrid Auto Focus technology enables the system to intelligently focus at a desired z-height without any mechanical movement from the X-ray source or stage. This allows the system to accurately capture image slices in a way that can significantly reduce the measurement uncertainty of the system.

The **V810 Series2 XXL** has incorporated *Scan Path Merging (SPAM)* a new state-of-the-art technology that can reduce board inspection time through optimizing multiple scan paths. *Single Unified Management Office (SUMO)* uses an 8-core processor with 128GB of RAM that accelerates the system to its maximum level of performance. *Simultaneous Efficient Reconstruction Technique (SERT)*, a new 64bit imaging processor architecture, changes *Predictive Slice Height (PSH)* from an additional inspection process to a real time function as part of a single scan path.

The **V810 Series2** is coupled with advance package inspection capabilities including 3 layer Package on Package (POP), LGA, pin in paste, solder charge etc. The test coverage of the V810 Series2 XXL is improved further through the introduction of nonlinear reconstruction technology for highly shaded components such as 8 layer GBX connectors and power transistors. New Floodfill Voiding Algorithm enhances the accuracy and detection of various pad types for voiding. Wide Vision increases the reconstruction region of the system to 3 x 3 inches allowing users to view an entire component within a single frame.

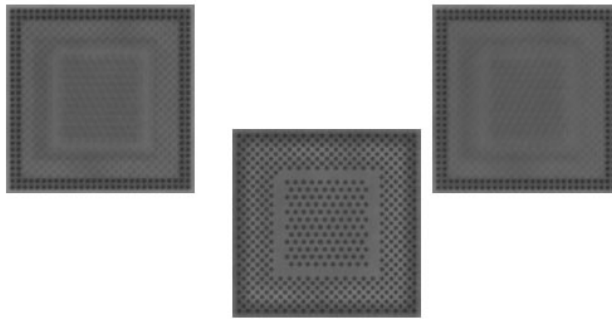


Figure 1: Images of 3 layers POP

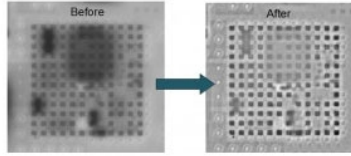


Figure 2: Image of LGA

Both the **V810 Series 2XXL** and **V810 Standard** share the same software and programming environment, which helps to reduce any program fine tuning time between the two systems. The **V810 Series2 XXL** comes with the world's fastest inspection speed performance as well as widest solder related defect test coverage which increases yields and return on investment. In addition, the system guarantees minimum escape rates, low maintenance and warranty costs, resulting in the reduction of operating costs. All the above makes the production lines more efficient and effective.

<http://electronicsproductionworld.com/javad-experiences-vitroxs-advantages-with-purchase-of-v810-series2-xxl-axi-system/>