

Barric increases PCB yields with XJTAG test solution

“Barric, a UK contract electronics manufacturer, opted for the XJTAG boundary scan system to improve test coverage and speed up fault diagnosis on complex printed circuits, and to significantly increase yields on the numerous board designs manufactured for multiple customers each month”

XJTAG is becoming a popular choice for contract manufacturers who need a modern boundary scan solution to test boards populated with ball grid array (BGA) devices which cannot be tested by traditional methods.

To meet this challenge, Barric has partnered with XJTAG and implemented its boundary scan system at its 12,000 square foot production facility at Diss in Norfolk, England, where it will complement the in-circuit, functional and flying probe test equipment. Since introducing XJTAG, the company has seen production yields increase significantly.

“The XJTAG system is an excellent and highly versatile product which has transformed the way we test complex printed circuit boards populated with BGA devices,” said Simon Bayley, Barric’s technical director. “We opted for the XJTAG system ahead of competitive products due to its price, speed of development and because the technical support was excellent. In addition, because the test scripts are device rather than board-centric in XJTAG, we are able to reuse them on different projects - this is a major benefit for a company that manufactures numerous different board designs for multiple customers each month.”

Barric provides a range of electronics manufacturing services from prototyping and new product introductions through to printed circuit assembly, system build and

repair. The company offers low volume, high mix, high-technology manufacturing and specialises in prototyping as well as short run and batch production of printed circuits.

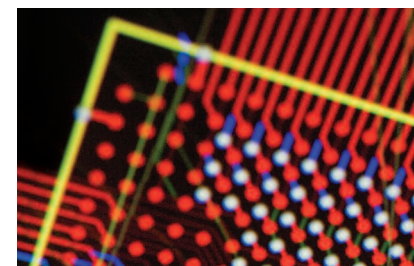
“We manufacture a dozen or so different development boards for one Cambridge-based company and work closely with their designers to ensure that XJTAG is optimised to best effect,” said Sarah Green, test engineer at Barric. “Using XJTAG, the designer or developer can automatically select or ‘pack’ all the relevant data for a particular board – BSDL files, netlists, XJEase files, pin mapping files etc. – and forward this

to our production team. This streamlines the whole development process and ensures that the yields are kept high and that any recurring issues are looped back to the design stage for rectifying.”

Barric works for variety of original equipment manufacturers across communications, medical, industrial and consumer markets. Having a sophisticated boundary scan solution is becoming a prerequisite and many customers are already using XJTAG during the board design and development stage.

The powerful and easy-to-use XJTAG boundary scan development system meets the growing market need for a cost-effective solution for testing tightly-packed printed circuit boards populated with JTAG devices such as BGAs.

XJTAG can test a high proportion of a circuit (JTAG as well as non-JTAG devices) including BGA and chip scale devices, SDRAMs, Ethernet controllers, video interfaces, Flash memories, FPGAs (Field Programmable Gate Arrays), microprocessors and many other devices. XJTAG also enables In-System Programming of FPGAs, CPLDs (Complex Programmable Logic Devices) and Flash memories.



opinion

Simon Bayley
technical director
Barric

“The XJTAG system is an excellent and highly versatile product which has transformed the way we test complex printed circuit boards populated with BGA devices. It is easy to use, requires no training, enables rapid fault diagnosis and consistently gives us 80% test coverage across digital circuits. We can now test our boards in a matter of minutes rather than hours and we have reduced the number of more complex board faults. This is good news for customers and for our overall efficiency as these boards typically contain large and expensive chips such as FPGAs, which we do not want to hold in our inventory any longer than necessary.”

Data Bank		Barric LIMITED	
Company	Barric Limited		
Nature of business	Contract electronics manufacturer		
Main product	Prototyping and new product introductions through to printed circuit assembly, system build and repair		
Customers	Original equipment manufacturers across communications, medical, industrial and consumer markets		
Locations	12,000 ² feet at Diss, Norfolk		
Employees	40		
Revenues	£4m		
Web site	www.barric.com		