

# *Lead-Free SMT, BGA & PoP Rework Workshop*

*Thursday 16<sup>th</sup> September* *The Oxfordshire, Thame*

Rework and repair of lead-free solder joints requires higher process temperatures, this can impact on the printed circuit board and components used today. The rework fluxes used and the equipment also require consideration along with greater attention to profiling board assemblies for rework. The session will provide a step by step guide to rework of all types of terminations and look at the potential problems faced with lead-free products. Attention will be paid to the types of defects that can be introduced when rework is not conducted correctly and what corrective actions need to be put in place. Consideration will also be given to the rework and replacement of conformal coatings Each delegate will receive a set of lead-free inspection criteria wall charts

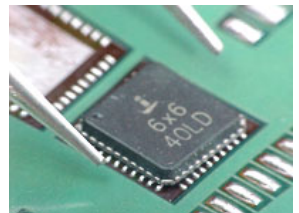
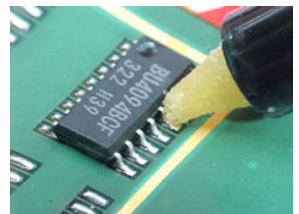
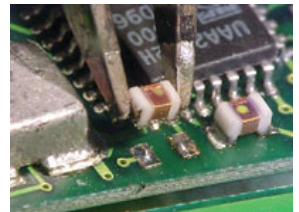
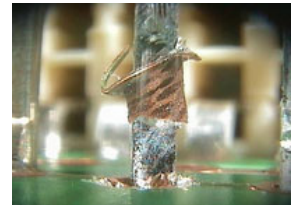
## **The workshop will cover:**

09.30am	Registration and Tea/Coffee
10.00am	Welcome and SMART Group update
10.10am	Hand Soldering & De-Soldering Conventional Component Procedures
11.00am	Surface Mount Passive Component Removal & Replacement Procedures
11.30am	Hands-On Rework Sessions & Exhibition
12.00noon	Ball Grid Array & Quad Flat Pack Removal & Replacement Procedures
12.30pm	Lunch, Exhibition & Hands On Rework Sessions
1.30pm	Cleaning Printed Boards after Rework & Repair
2.00pm	Conformal Coating Removal and Replacement Methods
2.30pm	Hands-On Rework & Inspection
3.00pm	Reliability Impact of Rework on Lead-Free Assemblies
3.30pm	Questions & Discussion

## **Who should attend?**

This event is ideally suited to engineers, quality and inspection staff, production and test operators and any member of staff tasked with manual soldering, rework of board assemblies. Managers and supervisors would also benefit from a fuller understanding of the basic issues currently being experienced during modern rework and what are the most up to date techniques and equipment

*Delegates will have the opportunity to win SMART Group Lead-Free Training CD-ROMs  
and a Free set of Lead-Free Inspection and Quality Control posters*



### Directions to venue

The Oxfordshire, Rycote Lane, Milton Common, Thame, Oxfordshire OX9 2PU  
(Don't follow your GPS route all the way, the post code will take you to a farm and the farmer can get a little upset with so many visitors)

### From London

Leave the M40 at Junction 7 and take the A329 to Thame.  
The Oxfordshire is on the right-hand side of the A329 just 1.5 miles (2.4 kms) from the motorway.

### From Oxford

Follow the signs for the A418 and then A329 to Thame

### From Birmingham

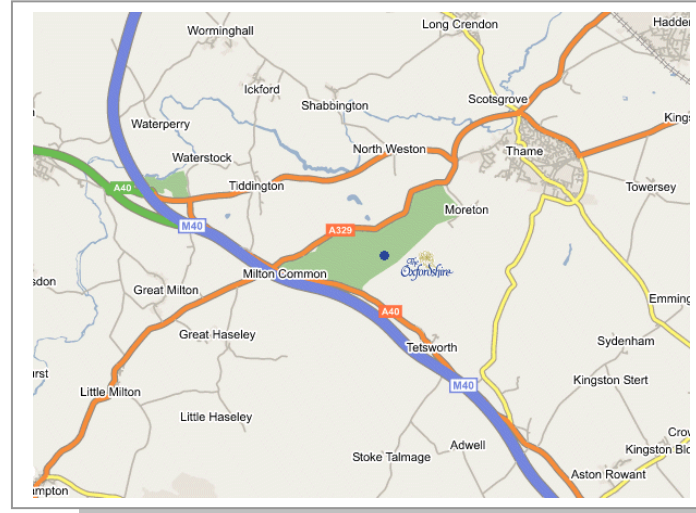
Leave the M40 at Junction 8a (no exit at junction 7) and take the A418 to Thame for 0.25 miles, then take the 1st right (A40). Follow this road, at the A329 and then turn left. The location is 1.5 miles on the right-hand side.

Visit SMART Diary [www.smartgroup.org](http://www.smartgroup.org)



Get your free Lead-Free Defect Guide from SMART Group

Ask SMART about on site training workshop just for your team



*To book your place fax your booking form to SMART Group registration 01494 473975*

Please reserve \_\_\_\_\_ places at the workshop on 16th September 2010  
£85 SMART Group members/£175 Non members + VAT)

Name: \_\_\_\_\_ Name/s: \_\_\_\_\_

Company: \_\_\_\_\_ Address: \_\_\_\_\_

Post Code: \_\_\_\_\_

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_

Email: \_\_\_\_\_ @ \_\_\_\_\_

Emails: \_\_\_\_\_ @ \_\_\_\_\_

Card type: Visa or Mastercard Card no: \_\_\_\_\_

Card expiry date: \_\_\_\_\_ Card security code (3 numerals on signature strip) \_\_\_\_\_

Signature: \_\_\_\_\_

### Table Top Exhibition Space

If you would like a table top space at a SMART Group event please contact Tony Gordon to discuss availability at the date in question or go to [www.smartgroup.org/images/stories/events/TableTop2008.pdf](http://www.smartgroup.org/images/stories/events/TableTop2008.pdf)

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