

Welcome to our newsletter

As the disappointingly short summer draws to a close and the exciting spectacle of the Olympic Games is behind us, we have GOOD NEWS – we have a busy schedule of events for the coming months and a newly designed web site due soon.

Now its time to focus on the rest of the year and we are pleased to announce a packed programme of SMART Group events, with something for everyone.

Our first event covered one of the hottest topics in the electronics industry, the concern about the increasing supply onto the market of Counterfeit Components.

The UK Electronics Industry is worth £23 billion pounds a year and is the fifth largest in the world. It employs over 250,000 people in 11,000 workplaces. The equipment it produces is pervasive, and underpins virtually every other sector of economic activity. Recent years have seen a significant increase in the amount of counterfeit electronics components coming into the UK. All told, this phenomenon could be costing the UK economy up to £1bn a year. In an ever more competitive global marketplace, counterfeiting creates additional costs that impede the competitiveness of UK manufacturing. (Source: UKEA)

The SMART Group day covered many aspects of counterfeiting and included some hands-on testing at ITRI.

This event is followed by two Environmental seminars, one at Dolby Labs, Wootton Bassett, the other in Galway, Ireland. We return to a popular venue at Wycombe for a 'Profiling Day'. Scotland has three part 'Back to Basics' days and our South Africa committee announce events at three venues.

Also you will see in this newsletter that we are participating in the November EKTN event at the Ricoh Arena in Coventry, we are organising a seminar programme with International speakers, including Joe Fjelsted from the USA.

We have concentrated this newsletter on future events, all listed on page 2 (and more on the EKTN event page 3).

We congratulate Bob Willis on recently being presented with an International Award in the US (see page 4). Finally, if you did not collect your 'Lead-Free Defect Guide 2' (see page 4), then we urge you to pick up a copy at any of our upcoming events.

Warm Regards from your hard working committee.....
Mike Judd

'Solving Counterfeit Components' at ITRI, September 10th 2008



Wayne Lame ITRI showing delegates the use of SEM to examine components and analysis material differences between good and counterfeit parts



SMART keynote speakers Ben Carter & David Akhurst from General Dynamics at the counterfeit component workshop

DIARY 2008

SMART Group announces a packed programme of events for the remainder of this year, including an exciting series of seminars with leading technology experts during the EKTN event 'Technology Breakthroughs – Bending the Design Rules' to be held at the Ricoh Arena in Coventry.

September 10th

'Solving Counterfeit Components
– The Problem, Identification & Testing'
St Albans, Hertfordshire

September 18th

'New Environmental Regulations
– Beyond Reach?'
Wootton Bassett, Wiltshire

September 25th

'Environmental Directives Update Seminar'
Galway, Ireland

October 7th

'Conformal Coating Workshop
– Hands-On'
Hemel Hempstead, Herts

October 8th

'Back to Basics Part 1 – PCB
Manufacture'
South Queensferry, Scotland

October 13th

'The A to Z of Soldering'
Cape Town, South Africa

October 14-15th

'The A to Z of Soldering'
Midrand, South Africa

October 16th

'The A to Z of Soldering'
Durban, South Africa

October 28th

'Step by Step Temperature Profiling'
Wycombe, Bucks

October 30th

'PCB Design for Manufacture
& Assembly'
Shannon, Ireland

November 6th

'Profit from RFID in your Business'
South Queensferry, Scotland

November 17-18th

'Technology Breakthroughs – Bending
the Design Rules' More detail on
page 3 of this newsletter.
Ricoch Arena, Coventry

November 26th

'Hands-On Wave Soldering Workshop'
St. Albans, Hertfordshire

December 2nd

'Monitoring & Controlling Your
SMT Process'
St Albans, Hertfordshire

December 4th

'Logistics in Electronics Workshop'
Cork, Ireland

[Advance information on
events early in 2009](#)

January 22nd

'Materials Reliability Workshop'
Hemel Hempstead, Hertfordshire

February 3rd

'Lead-Free Rework & Repair Workshop'
Thame, Oxfordshire

February 12th

'Back to Basics Part 2 – PCB Assembly'
Dalgety Bay, Scotland

April 23rd

'Back to Basics Part 3 – System
Assembly & Test'
Livingston, Scotland

To avoid disappointment **BOOK NOW**,
we look forward to seeing you soon.

For more information on all events
contact Tony Gordon, Secretary
SMART Group info@smartgroup.org
or visit www.smartgroup.org

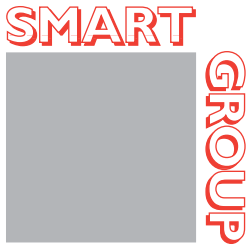
Coming Soon...

The newly designed SMART Group website!

www.smartgroup.org



www.smartgroup.org



Participates in EKTN event at Midlands Ricoh Arena

Trade & Investment TechnologyWorld08 'Your Springboard to a Digital World' 17 – 18th November, at the Ricoh Arena, Coventry more on www.technologyworld08.com

SMART Group is delighted to be involved with this EKTN Electronics Knowledge Transfer Network, event

'Breakthroughs - Bending the Design Rules!' Seminar (EKTN Seminar supported by SMART Group)

Design, development and manufacturing engineers have a unique opportunity to look into the future of electronic design, componentry, printed circuit technology and environmental breakthroughs. However, for some this is not the future: it is now! A group of world class presenters will illustrate existing and current technology developments overcoming functional and reliability concerns now and for the future.

Eliminating solder joints, reducing heat generation, harvesting exiting energy, flexible interconnection, system in package are practical solutions for many applications but how can they be cost effective and implemented, this EKTN seminar will illustrate how to achieve these goals.

This seminar brings together International speakers including:

- Joseph Fjelstad – Verdant Electronics
- Thomas Ahrens – Fraunhofer Institute
- David Pedder – TWI



The Midlands Ricoh Arena, Coventry

Seminar delegates will each receive a copy of the presentations, be able to meet and discuss design, production and reliability issues with speakers. Delegates will also be able to register for a FREE copy of Joe Fjelstad's latest book covering the principles and applications of the Occam Process plus the opportunities for flexible interconnection technology.

Each day of the seminar delegates will be able to join in a 'Question Time' session and an open forum, also taking advantage of a table top exhibition. There will also be the opportunity of visiting 'Technology World08' located adjacent to the seminar and table top exhibition area.

'TechnologyWorld08' will be the 5th year it has been held, it brings together UK and companies from across the globe to do

business, effectively via EKTN's 'speed-meeting' approach. It provides a highly efficient platform for companies to identify and build new meaningful business relationships. You will find suitable buyers, sellers, partners, and collaborators to accelerate business development, and achieve measurable competitive advantages.

What did visitors at the previous 'Technology World 07' report?

"Exposure to new ideas, solutions and good opportunities to talk in detail. Very few conferences are as geared round tangible, brokered opportunities"

"This event allowed us to see more contacts and technology than at an ordinary show"

"Networking with UK companies and associations as well as UKTN people was most beneficial"

Don't Forget SMART Group now offers On-Site Training

Each delegate receives a certificate of course attendance and the company receives two interactive CD- ROMS to allow continued support.



SMART Group's Honorary Vice President Receives International Award

SMART Group proudly congratulates its active campaigner Bob Willis who was presented recently with the 'International Excellence in Leadership' award at SMTA International in Orlando.

JoAnn Stromberg, Administrator for SMTA, commented that Bob had always been 100% dedicated to the success of both SMART Group and the SMTA. "It has been apparent to many of us for a long time that we can always depend on Bob to assist us with our international growth, programs and opportunities. You have truly captured the meaning of our 'international

excellence in leadership' award."

"Bob's support to our industry for over two decades spans almost every continent! It is a pleasure to say that you are a person who has really made a difference to the SMTA!"

Paul Salmon, Chairman of SMART Group, offers congratulations to Bob on behalf of all his colleagues in the SMART Group.

"Bob has been a key figure with his involvement in the introduction and implementation of lead-free process technology. Among his many successes he has coordinated the 'SMART Group Lead-



'Free Hands-On Experience'. On behalf of the Steering and Technical Committees of the Group we extend our sincere congratulations on receiving this International Honour."



The SMART Group Lead-Free Defect Guide2

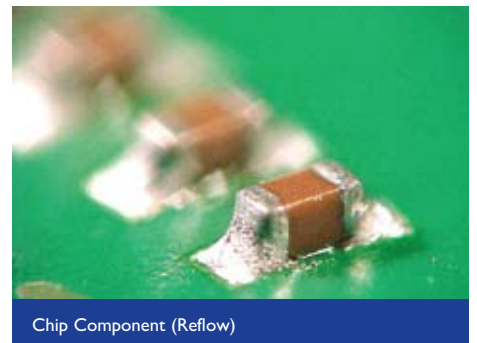
Have you got your copy?

The launch of this second guide is a useful and informative reference for recognising and solving problems within your manufacturing and design process.

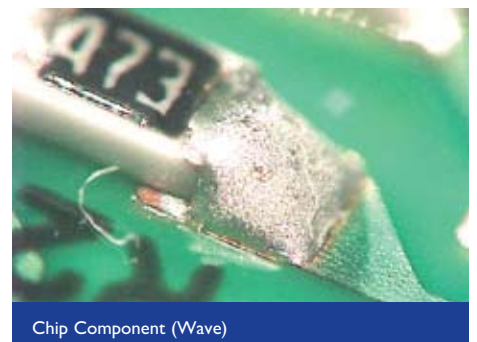
As we in the industry have seen, the defects encountered during and after implementation of lead-free soldering, have brought us a variety of new (and in some cases old) challenges. This lead-free guide is a compilation of defects designed to help managers, designers, engineers and operatives to solve these everyday problems and to let them troubleshoot effectively and efficiently. Amongst all of this change there has also been reassuring constants, good manufacturing still requires intelligent designs, a capable process, reliable manufacturing controls and the people to design, implement and drive them through production with minimum disruption.

The SMART Group has been at the heart of disseminating information regarding the diverse research and development needed to implement the change to lead-free soldering. It is due to the knowledge and feedback we have built up, through seminars, the European LEADOUT project, correspondence on our unique Email Forum *smart-e-link*, that we have been able to confidently put this defect guide together. We would like to thank all of those SMART Group members and speakers at events who have given freely of their time and experience. We hope you find this a useful and informative reference guide.

*Naim Kapadia B Eng DMS IET,
SMART Group Technical Committee Member*



Chip Component (Reflow)



Chip Component (Wave)