

Short Circuit

The monthly newsletter for Intellect's electronics members

intellect
REPRESENTING THE UK TECHNOLOGY INDUSTRY

January 2009

UL standard 796: fit for purpose?

Intellect has recently been doing a lot of work on behalf of members to resolve concerns about services provided to them by Underwriters Laboratories (UL) International. UL were invited to the last meeting of the PCB Fabricators and Suppliers Group (held on 07 October 2008) to discuss concerns that the industry has in relation to the services that UL provides to them. Some progress was made in terms of alleviating industry wide issues concerning services provided by UL, specifically in relation to the UL 796 standard, and the definition of what processes UL consider to be 'subcontracted' and 'multi-site' and how those definitions affect the PCB sector.

Members remained concerned that, despite their attendance at the meeting in October, UL have done little to alleviate concerns in relation to the core issue at hand: that UL enjoy an effective monopoly of the market for safety certification of PCBs as theirs is the sole safety mark that is commonly used in the PCB fabrication sector, which in turn serves markets heavily driven by need for such certification. They note that UL disagree with this view. At the same time, the reality is that UL certification is a key requirement on the part of most if not all of their major customers. Other certification organisations are generally not recognised by them. These facts have led, in the view of the group, to a situation where the testing regime required to maintain UL 796 certification includes a number of requirements that are

'unnecessary'. In addition, members view the costs that must be incurred to maintain compliance as 'excessive'.



Underwriters
Laboratories

UL have since attended another meeting at Intellect, where they responded to a detailed set of proposals on how to effectively revise the UL 796 standard in order to alleviate these concerns. Some of these proposals centred around modification of the qualification process for the addition of new materials to a UL File, fabricator involvement in follow-up testing of new materials added to a file and the identification of a coherent cost model for ensuring UL standard compliance.

It was stated that the recommendations of members would be presented to the Primary Designate Engineer for UL 796, Ms. Crystal Vanderpan, with the next action being into initiate a research project to determine if some of the technical arguments made by members can be validated. In the mean time, Intellect will be canvassing other leading industry bodies, such as the IPC and the EIPC, to gain their support for the proposals being made.

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The battle against counterfeit components: Intellect launches new initiative

As we have mentioned in previous issues, Intellect's drive to reduce incidences of counterfeit electronic components entering the supply chain continues apace, and we hope that all members will too. Intellect members are primarily users of components rather than manufacturers or distributors of them. We include in membership a wide range of defence prime contractors, consumer electronics Original Equipment Manufacturers (OEMs) and Electronics Manufacturing Services (EMS) providers who serve most main markets for products that

have an electronic element to them. While we do have some leading component OEMs in membership of various types and sizes, our primary interest in the issue of counterfeiting lies with those member companies who are directly affected: namely those companies who undertake electronic assembly of some kind. Succinctly, members would like to see active measures taken that help to reduce the risk that they will themselves source components that are counterfeit or fake.

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We recognise that different elements of the supply have different perspectives on how to address this phenomenon and we are prepared to support awareness raising activities and lobbying in order to ensure that Governments and the EU devote further resources to combating it. At the same time, we believe the situation is now serious enough to take warrant concrete action to help component users as soon as we practically can rather than look to the outcome of separate initiatives.

The primary route for the majority of counterfeit components reaching the UK (regardless of their origin) is the non-franchised or independent distribution chain. While there have been some reported cases of counterfeits sourced from franchised distributors, they are relatively few in nature. We do advise members that wherever possible, they should source components from franchised distributors.

However, it remains the case that in some circumstances component users are compelled to turn to un-franchised distributors for a variety of reasons*. In the light of this, we believe that a number of specific measures need to be taken that focus on helping component users minimise risk.

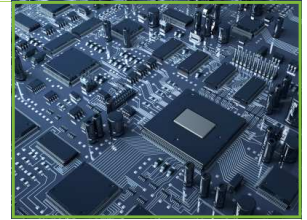
These measures should be understood in the context of our view that in order for them to have any relevance or enforceability at all, they can only be applied to non-franchised distributors who have some form of physical presence in the UK. We do note that many component users source components from all over the world. However, the nature of today's supply network and our status as UK centric (and non-Governmental) organisation precludes us from taking any steps in relation to them. Any user who sources from a non-franchised distributor with no UK presence would do so on the principle of 'Buyer Beware'.

▶ The introduction of a specific code of practice/list of required processes and procedures for non-franchised distributors of electronic components. This will focus on specific measures and processes they must take in order to minimise the risk of counterfeit components entering the supply chain. Intellect members (specifically, EMS providers) have already reviewed and approved an existing process system used by a leading UK non-franchised distributor. Such approval signifies a general view that this system, if implemented by all distributors, would substantially minimise the risk of their sourcing counterfeits.

▶ Intellect is in the process of working with our members and the distributor concerned to formulate a formal process for minimising risk that could be rolled out to the rest of the non-franchised distribution chain. On completion of this process, we will contact all non-franchised distributors that we can locate in the UK and invite them to commit to adhering to the code. In return, they will receive an Intellect distributor 'quality mark'. This is intended to act as some guide to component users as to which non-franchised distributors have adequate processes in place to effectively minimise risk.

We recognise the difficulty of enforcing the 'quality mark' system proposed and do note that would be difficult to monitor adherence to it. To some extent, we can only take adherence, once assurance is given, on the basis of trust. Because of this, we believe that any database/website relating to counterfeit components in the UK (which we understand is likely to be initiated) should encompass a 'vendor alert' system similar to that used by the ERAI in the USA. Intellect would be prepared to support both launch events and a publicity drive to encourage UK component users to report cases of counterfeiting anonymously via this mechanism. We would then periodically check the database.

If any non-franchised distributor was reported via the vendor system, and they had



also committed to adhere to the code, we would seriously consider removing them from the scheme unless members viewed the reported case as an isolated incident. The process for removal from the scheme has not yet been discussed or agreed.

Intellect members who have inputted into this process accept that it is never going to be possible to completely phase out the phenomenon of counterfeiting. We do accept that any system can never be full proof and that other stakeholders may find fault with it. However, interested members are of the view that having some system which allows them to start to minimise risk is better than none at all. We know that the representatives of component users we have consulted feel the system identified would, if effectively implemented, help to minimise risk.

Finally, we recognise the concerns that component OEMs may have over the measures we plan to enact. We have reported these concerns to members, who acknowledge that they do need to improve their sourcing choices to minimise risk, but at the same time should have some form of safeguard in the event that they are forced to go outside franchised channels.

*These can include lead-times from a customer that an authorised distributor cannot supply in time to meet, or else the fact that environmental legislation has created a shortage of components for applications exempt from their provision.

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Peaks and troughs: UKEA map UK electronic industry trends

Intellect is a founding member and lead sponsor of UKEA, an organisation formed of 12 trade associations representing companies with significant interests in the electronics sector. Through the UKEA, electronics trade associations in the electronics industry are, for the first time, integrating the data they collect. The first phase of the project has seen three associations, representing differing sub-sectors in the electronics industry, all make efforts to combine their figures. These were Intellect, GAMBICA- who represent companies that produce instrumentation and laboratory technology equipment industry - and IMAPS UK, who represent specialist electronic component manufacturers.

The collated results from nearly 100 respondent companies focus on the analysis of overall market confidence and external factors affecting UK businesses. It is interesting that initial results indicate an unexpectedly constant level of confidence in the markets that respondents operate in. We have not seen order books fall off the same cliff that has been the case in other manufacturing sectors. A notable improvement in market confidence on a short term quarterly basis is offset by a drop in market confidence from last year to next. Long term, it is very difficult to know what the future holds.

At the same time, there is a notably resilient tone to some of the results received. This resilience is primarily due to experience many key market players gained during the major downturn to

affect UK electronics, which as a sector shrank consistently from 2001-2006. Those UK companies who remain are evidently stronger, fitter and wiser for it. Figures on current orders based on volume, point to the fact that current market conditions were foreseen. This has been factored into business plans across all three sub-sectors, and UK electronics is better for it.

As economic pressures increase, a domino or ripple effect is often witnessed with one factor or element affecting another. Interestingly, the UKEA trends survey does not point towards any expectation of a reduction in expenditure in R&D. Spending is apparently going to be consistent over the next few years, not just the new few quarters. The same cannot be said for confidence in future employee levels. Whilst it could be judged as pessimistic, given that trends show no expectations of a change in numbers, this portion of the survey was judged on a quarterly basis indicating short term rigidity but possible long term fluidity.

The UKEA data also outlines that expenditure levels and market confidence is generally flat. What factors, if any, are then limiting growth in orders or contracts? Trends show a greater number of factors limiting growth in domestic orders, opposed to factors limiting exports. Factors listed as limiting growth included the political/economic climate, selling capacity, and credit or finance difficulties. Perhaps surprisingly these factors were far outweighed by respondent's competitive

position, and the number of projects deferred by customers.



Factors related to the limitations impinging on the industry's ability to fulfil orders or contracts, indicate longer term trends aside from any economic crisis. Manufacturing development, regulatory and credit issues, all remained low when compared with supply chain issues, skill levels, and low staff levels. Given that respondents pointed towards staff and skills shortages as dominant factors, it is not surprising that no reduction in employee levels is anticipated.

Trends are obviously indicated by a sequence of peaks or troughs. However the UK Electronics Industry has not been subject to any mountains or valleys, but rather puddles and mounds. And this no bad thing. It's clear that the industry understands not only itself but also the economic climate in which it exists. Whilst other industries are faltering, UKEA's trends project shows UK electronics to be cautious yet hopefully that it can weather the current economic storm.

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HIGH TECH low carbon WEEK 2009

What is it?

High Tech : Low Carbon Week (HTLCW) 2009 is a series of small events, technology demonstrations and debates all focused on the theme of 'how technology is tackling climate change'.

The timing of HTLCW could not be more important. The UK government has just increased our carbon emissions reduction targets from 60% by 2050 to 80% by 2050. We have a newly created Department for Energy and Climate

Change who are wrestling with how we will meet these ambitious targets.

Technology has a central role to play, not just in improving the energy efficiency of our devices and networks but also in developing low carbon technologies that decrease the carbon emissions of other sectors.

HTLCW will look at how the technology sector is meeting these challenges. Partners and stakeholders from

government, technology companies, other trade bodies and NGO's will all be contributing and hosting sessions during the week. If you have an interest in how technology is tackling climate change you need to be there.

High Tech Low Carbon Week takes place from Monday 09 February - Friday 13 February 2009 at various venues throughout the UK. Find out more at www.intellectuk.org/htlcweek

A - Z of lead-free reliability workshop - 21 January 2009

Manufacturing high reliability lead-free circuit assemblies is challenging, and understanding the pitfalls and knowing material properties is clearly desirable. This meeting will address a wide range of issues that include material and processing properties.

Examples include copper dissolution in selective soldering, where a method has been developed to measure dissolution rates with different alloys, and the work has produced a best practice guide. Tin whisker remains an important issue, and work at NPL has developed a special test vehicle that provides a sensitive test to measure the mitigation properties of conformal coatings.

The workshop will cover topics such as how copper dissolution with different lead-free alloys and copper types can be measured so that processing problems can be reduced; conformal coatings can protect circuitry, but how do we measure it and how good are they?; what is the stability of thermo-plastic substrates and conductive adhesives and their reliability performance and measuring tin whiskering and conformal coating mitigation performance.

This session aims to provide guidance to designers, engineers, supervisions and operators looking at building lead-free products, where materials selection and processing are key parameters in

defining quality.

The workshop will be held

on 21 January 2009, 09:30 at the National Physical Laboratory, Hampton Road, Teddington, Middlesex, TW11 0LW.

For more information, contact Tony Gordon T 01494 465217 or visit www.smartgroup.org/pdf/TableTopSpace2004.pdf



Technology Strategy Board to Invest in European Collaborative Materials R&D

The Technology Strategy Board has allocated an indicative budget of 1.5M euro to support UK industry and associated S&T organisations within a 20M euro collaborative Materials R&D programme (MATERA).

A competition call will be launched during March 2009.

Topics will include:

- ▶ Multifunctional Materials
- ▶ Engineering Structural Materials
- ▶ Bio-based Materials & Bio-inspired Materials

For TSB contact information, visit: www.innovateuk.org/deliveringinnovation/internationalprogramme/matera.ashx

For more information about MATERA, visit: www.matera.fi

* Northern Ireland will have a separate funding stream provided by Invest NI www.investni.com/index/grow/research_and_development.htm

Plextek design helps Landis+Gyr secure multi million dollar advanced metering contract with US power utility

Plextek's Ultra Narrow Band (UNB) radio telemetry technology is being utilised in AMPY Pay-Smart™ metering solutions from Landis+Gyr. Based on the AMPY meter's performance in initial trials, Landis+Gyr has recently won a \$52m contract from Arizona utility 'Salt River Project', the third largest public power utility in America, for the provision of a further 300,000 units.

Plextek is responsible for the development of the UNB communications system modules featured within the AMPY Pay-Smart™ meters and the associated base stations.

The AMPY Pay-Smart™ metering system allows customers to view real-time costs and charges on their account, as well as

reducing costs for the supplier by allowing them to take meter readings from a central hub.

"We have been working with Plextek for several years on the development of this innovative two-way communications technology. The UNB system performance meets the unit cost and radio coverage that the customer needs," said Jonathan Elmer, CEO of Landis+Gyr AMPY Solutions. "The resulting network-wide economies of scale were a significant factor in securing the contract extension with the Salt River Project."

"We are delighted that Plextek's UNB technology components have helped pave the way for Landis+Gyr's recent

contract win and this very significant deployment," said

Mark Hunter, programme manager at Plextek. "Plextek's UNB technology is optimised for long distance, low power applications where the data transmission rate is low which makes it perfect for two-way meter communications. With more emphasis being placed on energy efficiency, wireless meter systems such as AMPY Pay-Smart will start to become a key part of people's homes."

www.plextek.co.uk



Axiom demonstrates commitment to equal opportunities in electronics manufacturing

Axiom has signed up to an innovative new programme to encourage and develop career progression for women working in the science, engineering and technology sectors in Wales.

Three female members of staff at Axiom Manufacturing Services have joined the Career Progression for Women (CPW) development programme which helps women combat the challenges they face working in traditionally male dominated industries.

Semta, the Sector Skills Council for Science, Engineering, and Manufacturing Technologies, launched CPW in Wales following the success of a similar project in England.

Said Ian Smith "Semta's Women and Work project, which recently ran in England, was a great success. The CPW initiative is similar; and it also allows us to identify the individual needs of women

working in the science, engineering and technology sectors in Wales and respond directly to them in a timely case by case way. That means unlocking the potential of women in the workplace so employers can make full use of their skills. We have 50 women from 23 organisations signed up to pilot the programme and look forward to extending CPW to more women once the pilot is complete."

CPW is mainly funded by the Welsh Assembly Government and contributions from the 23 companies involved in the project.

Joan Jones said, "Having spent most of my career in the engineering industry, I can identify with women working in the sectors that will be assisted by CPW and the challenges they face such as work life balance and the gender pay gap.."

Tina Dunstan, HR manager at Axiom is one of the three



women at the company signed up to CPW. She said, "At Axiom, we have an extremely strong equal opportunities policy and we believe our workforce is an asset that requires investment, just like other areas of the business. Initiatives like this enable us to fulfill our ambition to be the employer of choice within the UK Electronics Manufacturing Services (EMS) industry.

"This initiative will work in conjunction with our ongoing leadership and management development programme, where we are ensuring that we have the right people, equipped with the right skills, to drive the business forward."

www.axiom-ms.com

News in brief

Businesses warned of greenwash-out

Sustainable business experts Envirowise are warning companies not to get swept away by 'greenwash', urging directors to consider the basics of reducing environmental impact, as well as building a pro-environmental image. Envirowise says that many companies are attracted by the visible end of green business and don't realise that simple low and no-cost measures could have an equally effective impact on environmental performance and profitability.

Source: www.envirowise.gov.uk

Teknoflex appoint technical sales manager - France

Teknoflex Ltd has recruited André Nocturne as technical sales manager, France and the Benelux Countries. André has over 25 years in the flexible circuit industry having held positions in technical production and technical sales roles.

Source: www.teknoflex.com

Intellect hosts a speech by the Home Secretary, the Rt Hon Jacqui Smith

In a keynote speech at Intellect about protecting people while protecting their rights, the Home Secretary announced a consultation on the use of RIPA that will examine:

- ▶ a revision of the Codes of Practice that come under RIPA
- ▶ which public authorities can use RIPA powers
- ▶ how those powers are authorised, and who authorises their use

She also announced that there will be a consultation on proposed changes to RIPA powers to bring them in line with tests of safeguards, openness, proportionality and common sense. Intellect is delighted to have hosted the speech.

The technology industry plays an important role in the protection of UK citizens, from intelligent surveillance systems at airports to sophisticated DNA sampling to joined up national security services.

Intellect has produced or is working on the following documents as part of its work streams on the security agenda.

- ▶ The Jewel in the Crown – a national security & resilience architecture
- ▶ Data Security and Data Protection Guidelines for Offshoring and Outsourcing – to anticipate and address the data security and data protection issues which may affect the success of outsourcing projects



- ▶ Identity Management position paper - planned for January/February 2009, which expresses the IT industry's views on this subject

Listen to the full speech at www.intellectuk.org

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If you are interested in sponsoring a future edition of **Short Circuit** or have any relevant industry news that you would like to be considered for inclusion in forthcoming editions, please contact Sarah Voller on T 020 7331 2041 or E sarah.voller@intellectuk.org

Editorial should be submitted no later than the 07 of each edition month.

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Switched On - Monthly overview of the big stories breaking in digital communications

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After 5 series - Customer centric application development: Myth or reality?

Date: 28 January 2009
Time: 17:00-20:00
Venue: Catalyst Room, Intellect Conference Suite, Russell Square House, 10-12 Russell Square, London, WC1B 5EE



Intellect and International Business Wales have run the 'After 5' series evening events since 2005. These free events offer delegates the chance to hear from leading businessmen in the field and network with senior business colleagues over a glass of wine.

In the third of four evening events, we look at

the customer/contractor relationship. Employment offshoring, spiralling costs and long implementation times are all terms well utilised by the media to describe the perceived performance of the traditional IT outsourcing model. With new approaches to the customer/contractor relationship such as agile methods for development is the industry approaching a paradigm shift for the better?

Cost: free of charge
Contact: Tammy Greeno
T 020 7331 2037
E tammy.greeno@intellectuk.org

Intellect member information afternoon

Date: 04 February 2009
Time: 14:00-17:00
Venue: Intellect Conference Suite, Russell Square House, 10-12 Russell Square, London, WC1B 5EE



Intellect is the technology trade association which serves to represent all its members and ensure their voice is being heard. Our free information afternoons have been set up due to popular demand to remind you how, as a member, you can benefit from your membership.

There will also be the chance to hear how one of our member companies expanded their knowledge and grew their business by being a member of Intellect.

These sessions are designed to inform you of our business offerings and how we can support you.

See how you can take advantage of free reports, position papers and business guidance; learn how to get involved in our 70 groups and committees; benefit from discounted rates on events and training courses; make full use of Intellect's website by promoting your company via the speaker library, members database and PR section; learn how to take advantage of over £6k worth of savings for your company; and benefit from our free legal and HR advice.

Cost: Intellect members only, free of charge
Contact: Francesca Sbuttoni
T 020 7331 2012
E francesca.sbuttoni@intellectuk.org

Personal impact and presentation

Date: 02 March 2009
Time: 09:30-17:00
Venue: Intellect Conference Suite, Russell Square House, 10-12 Russell Square, London WC1B 5EE



Personal impact and presentation is a one day workshop designed to increase your personal impact and effectiveness as a speaker.

The workshop, run by award winning actor and drama teacher, Charles Serio, whose current and past clients include Nokia, Ford, and SAP, is highly interactive, practical, innovative, and fun. It is designed to increase self confidence in any type of public speaking

situation.

Personal impact uses theatrical methods related to status, voice production, and manner of speech to help you improve your 'performance' when presenting to senior managers, conference delegates, interview panels, within work related team structures, and at meetings.

Cost: Intellect members £395+VAT
Non-members £695+VAT
Contact: Sam Baglioni
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