

Short Circuit

The monthly newsletter for Intellect's electronics members

intellect
REPRESENTING THE UK TECHNOLOGY INDUSTRY

November 2008

Important concession secured from UL International

Recent attendees at Intellect's PCB Fabricators & Suppliers Group will have witnessed what was, at times, quite a feisty meeting; especially with the appearance of a number of senior employees of UL International. We were pleased to have secured a number of changes of practice on the part of UL as a result of a sustained effort on this issue of their definition of 'subcontractors' and 'multisite processors' and how this affected hot air solder levelling subcontractors. It was apparent to Intellect members that in order to implement its recent change in policy, UL would need to visit the HASL subcontractors on behalf of all 85 UK PCB fabricators four times per year, virtually all of whom are holders of the UL796 standard and users of one or other subcontract providers of such services. This would result in approximately 340 FUS visits per year to the same sub-contractor. All of the charges for these visits would accrue to the 85 PCB fabricators, or file-holders, in question.

Furthermore, the vast majority of these visits would be unnecessary, as the HASL service provided is identical for each file-holder using

the service. The groups concerns on this issue were recognised, and it was agreed that rather than visit HASL

subcontractors four times a year, UL plan to request that subcontractors establish their own files with UL and that the process of assuring subcontractor compliance be based on traceability only. Subcontractors cannot however be compelled to open their own files. This proposed process is subject to final approval from UL's head office in the USA.

From Intellect's perspective, we saw it as a prime example of how, when the industry works together through its association, positive results can be achieved for everyone. We encourage members to provide us with more issues that affect their businesses, so we can show the added value that can be gained by working with us.

For further information, contact Henry Parker
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Keeping up with the neighbours: Intellect introduces EMS benchmarking survey

If you are like me, it has got to the point now where you almost don't want to pick up the newspaper or watch the news in the morning. An unrelenting stream of bad news threatens to darken your before day before it has even begun. UK manufacturing is often singled out for particular attention, with the Government's manufacturing index taking a nosedive in the last two quarters. As I write, it has been confirmed that economy as a whole contracted by 0.5% in the last quarter. Pictures of quiet assembly lines and stories of cancelled shifts have started to displace anguished bankers as the face of what is undeniably a downturn.

But where does the UK EMS sector sit in all of this? And are things really quite as bad for us as they are for everyone else? The

answer, to put it bluntly, is that it doesn't look as though they are. A number of anecdotal reports stating from members along the lines that 'actually we are doing very nicely thanks' prompted Intellect's Electronics Manufacturing Services Association (EMSA) to survey the industry as a whole to determine exactly what the situation was. Companies representing approximately 25% of the total turnover of the UK EMS sector (approximately £1.1bn) responded and the picture we got was generally more positive than we expected.

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Keeping up with the neighbours: Intellect introduces EMS benchmarking survey

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Broadly the results show that the UK EMS sector is performing well in comparison with the UK manufacturing sector, as well as the economy as a whole. Confidence in future performance is broadly 'as expected' and no respondents specified that such confidence is 'considerably diminished'. Likewise, 56% of respondents indicated order books levels, by volume, are 'as expected'.

At the same time, we certainly shouldn't go shouting from the rooftops. We have to remember that this data was gathered against the background of a sector that went through a particularly difficult time during the early part of the decade, with much high volume production moving wholesale to the Far East and Eastern Europe. Overall UK Electronics Output fell by 50% over the period 2000-2006. While other manufacturing sectors have suffered in recent years, and are certainly suffering now, I think that it's fair to say they have not been through such tough

times. It could well be that the EMS sector's expectations of market performance are lower than others. The results of the recent EMSA survey back this up, with no respondents indicating that confidence in future market performance had 'increased considerably' and only 6% indicating that their order books were 'much better than expected'.

We also have to think about the lifeblood of the EMS (in fact any) sector: the customers. With credit lines for them shattered, capital spends on product development and production is being cut back. Likewise, defence budgets around the world (especially in the UK) are being squeezed. This will inevitably have an impact on the UK sector, as many key participants are heavily dependent on business from prime contractors. The EMSA survey supported this view, with 40% of respondents citing 'project deferral by customer' as the key factor limiting growth in domestic business. The recent announcement that the Government will

bring forward some major capital spending projects (including defence projects) to try to stimulate the economy might help to reverse this trend.



At the end of the day, if interest shown in Intellect by EMS providers is any measure, we are seeing a sector in the long term that looks healthy. While it is likely that we aren't going to reflect the recently reported 17% growth in the global EMS sector during 2007 in the UK, our recent networking events have confirmed the sentiment that 'we are doing ok for now', along with a healthy dollop of scepticism about the prospects for the future.

For further information, contact Henry Parker [E henry.parker@intellectuk.org](mailto:henry.parker@intellectuk.org)

Throwing the book at you: UK export controls and UK electronics manufacturers

Recently, Intellect's Export Controls Group has undergone something of an expansion, with attendance levels increasing markedly from previous levels. Part of this has to do with the Government's increasing enthusiasm for export controls. This enthusiasm probably dates back to the 'Iraq supergun' affair and the prosecution of Matrix Churchill. Government's control exports and trade for a variety of reasons concerns about internal repression, regional instability and other human rights violations. Concerns about the development of Weapons of Mass Destruction, as well as national and collective security of the UK and its allies, are major issues at present. Government wants to be seen to be active in this area.

We have also noticed increasing Non-Governmental Organisation (NGO) interest in the defence market. Those familiar with the field will know that

particularly large change came about with the Export Control Act (2002) and its subsequent implementing regulations in 2004. Exporters are responsible for complying with the law, understanding the regulations and keeping informed and up to date via Export Control Organisation (ECO) Notices to Exporters and training programmes. The penalties and/or consequences of infringing export control legislation are enormous. These include unlimited fines and imprisonment, as well as being listed on Denied Parties List.

The key point for PCB fabricators & EMS providers is that this is not just an OEM related issue. Suppliers can be liable to export control legislation and need to take steps to comply. Some software and component manufacturers are well aware of their responsibilities. As an organisation, we are keen to promote the interests of law-abiding companies by doing all that can be done to ensure

rogue companies do not break the rules, thereby leading to a harsher export control

regime; in this respect sneaking on your neighbour might seem to some an appropriate measure.

The Intellect export control committee for export controls is JETSECC. Much JETSECC activity is about liaising with ECO; it also provides companies with mutual understanding and guidance. JETSECC next meets on 02 December 2008 and would welcome the PCB community.

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Plexus Kelso facility receives UK Best Factory Awards

Plexus Corporation recently announced that its Kelso manufacturing facility was recognised in two categories at the 2008 UK Best Factory Awards. These awards, organised by Cranfield School of Management Magazine, reward excellence within the UK manufacturing industry. Plexus Kelso was the winner in the Supply Chain category for its unique supply chain modeling solutions which drive world-class on-time delivery performance. In addition it was highly

commended in the Innovation category for achievements in the area of process development and continuous improvement utilising a Lean Sigma philosophy.

"We are delighted to be recipients of such prestigious awards," stated Willie MacKinnon, UK managing director. "Our people are our key differentiators. These awards represent a true testament of their pride in delivering world-class service offerings to our customers as we

continue our vision to be the best EMS company in the world in the mid-to-low volume, higher mix segment of the market."

www.plexus.com



Teknoflex launches new look website

Teknoflex Ltd, the UK's largest dedicated Flexible Circuit manufacturer, has launched its new website.

The site has been designed to assist purchasers and designers with up-to-date information about Teknoflex and the broad range of Interconnection

Technologies offered by the Company.

In addition to the new look website the company is soon to launch an updated version of its comprehensive "Designers Guide to Flexible Circuit Technology".

This will also be directly accessible via the website.

The site can be accessed at www.teknoflex.com

Plextek breaks into the 2008 Sunday Times Tech Track 100

Plextek, the Cambridge-based electronics and communications design consultancy, has made its first appearance in the Sunday Times Tech Track 100 - a nationwide ranking of Britain's fastest growing, unquoted technology companies. Based on impressive 56% average sales growth between 2005 and 2008, Plextek achieved a ranking of 56th in yesterday's report.

In recent years Plextek has been actively increasing business outside its core design consultancy work to increase its global competitiveness. This has included a range of product design services and the launch of its first branded product, the Blighter portable radar for the security market. Plextek now also provides contract manufacturing services

for its design customers, meaning the firm can now manage a product through its entire cycle from design to manufacture and supply. This transition has helped Plextek secure a number of big multi-million pound contracts including supplying its innovative Blighter radar systems to the UK MoD and long term, high value design and supply contracts with TRACKER Network UK and US company LoJack Corporation for production of stolen vehicle recovery units.

Colin Smithers, Managing Director and founder of Plextek commented; "We're delighted to have made it on to the Tech Track ranking and be regarded as one of Britain's fastest growing technology companies. For a company of our

maturity to achieve this level of sustained growth is a fantastic achievement.

Despite the current tough industry climate, we're performing well and are on track to post another year of solid growth."

www.plextek.co.uk



**Date for your diary... Intellect member information morning
Friday 28 November 2008**

Jaltek Group strengthens customer offering with strategic alliance agreement

Jaltek Group has announced a strategic co-operation agreement with EMS provider, Connect Systems International. Effective immediately, the agreement will enhance Jaltek's ability to provide full turnkey solutions from product design, through development and prototyping, and on to low-cost, high-volume manufacturing. The agreement confirms Jaltek's commitment to continue to add value to its growing client base.

Jaltek already has a number of existing customers eager to take advantage of this opportunity that will give access not only to 19 high-volume SMT (surface mount technology) production lines, but also volume cable and harness assembly manufacture and complete box build capabilities. The facilities are situated throughout Europe in Belgium, The Netherlands, Germany, Czech Republic, Slovakia and Romania and all have full quality approval to ISO9001:2000 and

UL.

Steve Pittom, sales director for Jaltek Systems, commented on the agreement and what it means for customers, "Jaltek has always been well positioned to deliver high-quality prototype manufacturing services and with various acquisitions over the last 18 months we are now in a very strong position of being able to offer all our customers seamless PCB layout and design and RF design support. This latest announcement completes our vision to be a turnkey solutions provider and provides our customers access to volume manufacturing facilities that already have all the military approvals in place."

Herman Struiwigh, marketing & sales director for Connect Systems, added, "Jaltek is a robust, profitable company with a proven track record for delivering added value to its customers. I am

delighted that we have agreed to combine our core competences and believe that it will deliver real advantages to all parties".



Steve Pittom concluded, "This is an exciting time for Jaltek as we continue our plans to expand our business and provide real added value for our customers. This announcement is a significant step in our expansion process and I would expect to see the company's turnover increase by at least 20%, per year, over the next two years".

www.jaltek.com

Hybrid bus powered by BAE Systems enters London transit fleet

A red London bus with a BAE Systems hybrid electric drive train was delivered this week to Transport for London and Metrobus, one of the city's principal bus operators. The bus, a double-deck model built by Britain's Alexander Dennis Limited (ADL), is among 17 hybrid units built by ADL and BAE Systems that will be evaluated in passenger service starting later this year.

Delivery of the bus at Euro Bus Expo 2008 in Birmingham marks the introduction of BAE Systems' HybriDrive® propulsion technology to the European market. The diesel-electric drive system, already in use on more than 1,500 buses in North American cities, is the world's leading hybrid system for urban transit.

"Our hybrid technology is the most proven in the industry, with more than 70 million miles of revenue service to date," said Rob Lindsey, BAE Systems director of transport systems for the UK and Europe. "Joining with Alexander Dennis brings the combined benefits of improved fuel economy, lower

production of greenhouse gases and other emissions, and reduced vehicle maintenance to the transit system and to the residents of London."

The HybriDrive system is used by transit agencies in New York, San Francisco, Houston, Toronto, and Ottawa. The system reduces emissions and fuel consumption while meeting the durability requirements of demanding urban transit operations. It consists of a generator, an electric motor, and an energy storage system managed by computerised controls. A diesel engine that turns the generator operates independently of the electric drive motor, allowing it to run at nearly consistent speed for optimum efficiency.

The system uses no mechanical transmission, a major maintenance item on traditional diesel buses, and features a regenerative braking system that produces electric power while reducing wear on the buses' conventional friction brakes.

The bus delivered to the London fleet uses a lithium-ion energy storage system that



increases battery life and reduces vehicle weight compared to previous hybrid designs. Lower weight further improves fuel economy and cuts emissions, and the battery system is self-monitoring and easy to service for further savings in maintenance costs.

To date, buses equipped with BAE Systems' HybriDrive propulsion system have saved five million gallons of diesel fuel and prevented more than 50,000 tons of carbon emissions.

www.baesystems.com

Intellect welcomes new electronics members

We would like to welcome Multipulse and Remploy, who have recently become members of Intellect.

Multipulse

Multipulse is a successful contract electronics manufacturer and engineering business, providing low to medium volume design and product development services to the industrial electronics market place. Incorporating project conception, prototype build, production, test, installation, commissioning and after sales service support. They specialise in communication and industrial electronic applications and have a 'Blue Chip' customer base.

www.multipulse.com

Remploy

Remploy is one of the UK's leading providers of employment services and employment to people experiencing complex barriers to work. They are passionately committed to providing sustainable work opportunities for those who need it most - making a positive difference to the lives of individuals and communities, and realising commercial benefits for everyone they work with.

www.remploy.co.uk



News in brief

It's good to share - Britain's bosses urged to disclose bills to save thousands

Sustainable business experts Envirowise are calling on Britain's bosses to disclose gas, electricity, water and recycling bills with employees to encourage them to take more responsibility for reducing company outgoings and lessen their environmental impact. The more transparent businesses are about the effect rising utility costs are having on the bottom line, the more staff will be encouraged to take a proactive stance towards waste minimisation and adopt the same approach to cost cutting in the workplace as they do at home.

Source:
www.envirowise.gov.uk

European chip sales grew 0.9% in September

The European market for semiconductors grew by 0.9% in September compared with the previous month, the World Semiconductor Trade Statistics (WSTS) reported. This corresponds to a decline of 1.5% compared to the same month last year. On a YTD basis semiconductor sales increased by 0.8% versus the same period in the year 2007.

Source: www.evertiq.com

Grenade camera to aid UK troops

A "grenade" camera, that would enable soldiers to look into hazardous areas, is being developed for UK troops. Dubbed the I-Ball the wireless device is robust enough to survive being thrown onto a battlefield. The I-Ball's internal camera gives a 360 degree view, with images being sent from the instant it is launched.

Source: www.bbc.co.uk

BBC Working Lunch film at Faraday

Interest in Faraday's expansion plans has reached a national level through the BBC's Working Lunch programme.

Working Lunch is a daily business, economics and personal finance show that airs at 12.30pm each day. The show tied in coverage of the US elections in Washington

DC, with an analysis of manufacturing companies in Washington, Tyne & Wear. The show has taken particular interest in Faraday due to our expansion plans despite the general economic doom and gloom.

This represents a great opportunity for our business to demonstrate its commitment to further growth even in an uncertain time. The show aired on Tuesday 04 November.

www.faraday-circuits.co.uk

Additional SPARK awards available to kick-start academic/industrial partnerships

The Integrated Products Manufacturing KTN SPARK Award scheme aims to kick-start a relationship between small companies and universities that haven't worked together before. This will improve the UK's innovation performance by accelerating the knowledge transfer of technology into UK-based businesses. In particular, it will help UK industry apply new technologies to the design, development and manufacture of complex products with integrated electronic and mechanical functions. This year the awards attracted even more sponsored grants, resulting in an additional two

awards, bringing the total on offer to six.

Previous winners of the SPARK Award have gone on to achieve great success. With their £5,000 grant, the University of Southampton developed an innovative electric thruster for underwater vehicle and marine turbine applications. It is currently being produced by UK company, TSL Technology and sold around the world with customers including the Massachusetts Institute of Technology (MIT), who are using the thruster on a new underwater vehicle.



For more details and to apply online, visit www.integratedproductsktn.org.uk/funding. Applications must be received by midnight Friday 21 November 2008.

If you have any questions, contact Paul Palmer, Director, Integrated Products Manufacturing KTN
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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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Industry Leadership Lunch

Date: 09 December 2008
Time: 12:30-15:00
Venue: The Holford & Orchid Suite, The Dorchester, Park Lane, London W1K 1QA



Intellect's Industry Leadership Lunch Series allows members to keep in touch with industry developments in the UK and abroad, and provides an opportunity to broaden business contacts.

Our speaker in December is Andy Green, Chief Executive Officer, Logica. Andy was appointed Chief Executive Officer and a member of the Board of Logica on 01 January 2008.

He is a member of the Nominations Committee and the Executive Committee.

This lunch will focus on 'The IT industry in the global economy'. Andy will reflect on the challenges he faces in transforming Logica to meet the needs of its customers in these highly uncertain and globalising times.

Cost: Intellect members £115+VAT
Non-members £230+VAT
Contact: Tina Compton
T 020 7331 2011
E tina.compton@intellectuk.org

Intellect High Tech: Low Carbon Week

Date: 09 - 13 February 2009
Time: 09:00-17:30
Venue: Various venues across the UK



If you want to find out how technology is tackling climate change you need to attend High Tech: Low Carbon Week (HTLCW).

HTLCW is about action and the practical steps that the technology sector is and will be taking to tackle climate change. It is about the technology related challenges and opportunities faced by technology companies, British businesses, Government and citizens.

It is about direct engagement and debate with business leaders and government ministers and a firsthand look at some of the technologies that will help the UK reduce carbon emissions.

This event is not a one-size-fits-all and is designed to allow participants access to all the information and a choice of engaging directly with only those elements you want to whether they be debates, technology demonstrations, keynotes or networking.

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

Intellect Annual Dinner 2009 with Bill Bryson

Date: 13 May 2009
Time: 19:00-23:00
Venue: The Dorchester, Park Lane, London W1K 1QA



Firmly established as the premier evening in Intellect's calendar, our annual dinner gives you a unique opportunity for networking with key figures in our industry, government ministers and officials. This event is the perfect way to entertain existing and potential clients.

This year's speaker is the fabulous Bill Bryson.

Bill is the author of several popular non-fiction books, most recently a memoir, 'The Life and Times of the Thunderbolt Kid', and a biography of William Shakespeare. His book 'A Short History of Nearly Everything' won the Aventis Prize and the European Union's Descartes Prize in 2005.

Cost: Intellect members £185+VAT
Table of 10 £1,850+VAT
Contact: Tina Compton
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