

Meet the CEO: NMI's Derek Boyd talks to David Baillie...



CEO of CamSemi and discusses life as a UK start-up from technology innovation, organisational development, global partnering and the immense opportunities that await companies that can have "*fleetness of foot*"

CamSemi started at the beginning of this decade when two world-renowned Cambridge University electrical engineering staff members had a vision for a novel way to implement very high voltage switches in silicon.

David has a great many interesting insights for us that we simply could not squeeze all of them into this space—the interview makes compelling reading.

The full article can be read from the NMI website

2008 On-the-Radar

There's a great deal of upcoming events from NMI and our partner organisations:

April

- Fabless Operations Forum
- Analogue, Mixed Signal and RF Design

May

- Born Global
- Embedded Master Class
- International Semiconductor Forum

June

- Embedded Systems / Software
- IC Packaging

July

- Power Electronics
- Wireless 2.0 (Partnered SiliconSouthWest)

*** Don't forget that NMI networks are FREE to attend for Members. For the latest details including how to attend please see the NMI events calendar

http://www.nmi.org.uk/events/events_calendar.htm

*** Speakers Wanted ***

We are always on the look-out for speakers and sponsors so if you're interested to participate in NMI Networks or raise the profile of your company contact robin.kennedy@nmi.org.uk for initial enquiries.

In this issue:

- **Meet the CEO:** What does it take to become one of the new breed of national champions? Derek Boyd talks to one such promising hopeful: CamSemi
- **On the Radar:** There's a great deal of interesting activities taking place over the coming months; here's our guide at a glance.
- **What's Going on with UK Manufacture?** Plenty! We've produced a summary report of 2007 activities and include a concise overview of what's coming up.
- **NMI's Outreach Programme:** Our early work is already producing results and we have some specific technology requests for you
- **Reports:** Why do some firms perform better than others—could there be clues in this original NMI research paper (we think so).
- **Business Update:** Incubation facilities, Legal Support and an R&D Tax Credit Case Study
- Should the UK have a **Silicon Centre of Excellence?** Have your say.

What's On In Manufacturing?

The UK and Irish regions, like many others, are operating in very challenging business conditions. NMI is supporting its members in a number of key areas by facilitating collaboration opportunities and providing access to specialist information. Our activities within Manufacturing continue to cover a broad range of topics such as **energy consumption**, **cost saving** and **efficiency improvement**. Here are some details of our recent projects and future events:

Fab Performance Benchmarking

We have recently completed the data collection phase of an extensive benchmarking study of 15 sites, which is a follow on from our study in 2005. This particular study focuses on Fab capability, Fab performance, Yield, Bottleneck Management, Suppliers and Human Resources data. This project delivers bespoke reference documents and provides access to a unique link between each of the participating sites to enhance knowledge sharing and continuous improvement.

British Airways Maintenance Visit

NMI coordinated two novel benchmarking visits to British Airways in Glasgow for our Equipment Engineering Managers in February. These visits provided a unique insight into the aerospace industry and how maintenance is controlled in a safety critical environment. The feedback from these visits was very positive and we will continue to search for further learning opportunities from other industries to support our members.

Up and Coming Knowledge Exchange Events

Supply Chain Team Meeting

We have recently formed a supply chain team with the senior engineering and procurement staff from many sites. The purpose of this group is to share knowledge but also to search for innovative solutions to cope with the challenges of the diminishing suppliers supply chain. We will be holding our second meeting on the **22nd April** at **Freescale Semiconductor** in East Kilbride.

Cost Saving Meeting

Cost saving is a way of life for all manufacturing facilities in order to compete globally, NMI understands the power of knowledge sharing in this area as well as the obvious tangible benefits that can be realised. We are therefore coordinating the first Cost Saving Forum at **National Semiconductor** on the **23rd April**. Participants at this event will share cost saving successes and their current activities in this area.

Waste Management Meeting

This particular forum is closely linked to cost saving too, our first waste management knowledge sharing workshop aims to discuss the legal complexities of this topic and to share experiences in this wide ranging area. This meeting will be held at **Shin-Etsu**, Livingston in **May**.

Plant Managers Meeting

On **May 8th** we will be hosting a meeting in **Cardiff** for our Plant managers which coincides with JEMI's S2K event. We consider this particular meeting vital to the strategic direction of NMI and welcome as much feedback as possible about our current and future activities. This event also gives a valuable opportunity for the senior folks in the industry to network with their opposite numbers from the other sites in the UK and Ireland.

2007 Manufacturing Report

See details below — contact us if you would like a copy.

[Email David.law@nmi.org.uk](mailto:David.law@nmi.org.uk) if you are interested in any of the above topics and we gladly provide you with more detailed information.



NMI is partnering the 5th annual IET & GSA International Semiconductor Forum to be held 14-15 May 2008 at ExCel London.

The 2008 Forum promises a strong programme of speakers with two tracks featuring business, executive, technology and operations topics.

For further information and to register visit www.ietfsasemiconductorforum.com

NMI members receive a promotional rate for this event—be sure to claim your discount when you register!

UK Silicon Centre of Excellence: Supporting UK Based Businesses

Is there a public/private strategic investment that can be made to foster growth for the indigenous micro-electronics industry?

This is the question that we're looking to answer and NMI has been commissioned to explore the opportunity of a public/private investment in a notional *Centre of Excellence*. The aspiration of such a centre is to foster growth and enterprise for domestically located companies and win international recognition. Whilst the issues are complex we're working hard to identify precise ways in which we can improve the prosperity of UK based organisations—and **you can help**.

If you have views on this then you can contact us directly: Helen.finch@nmi.org.uk

Incubation and Growth Facilities

The Innotek Centre is a new, purpose built facility that provides the ideal environment to enable intermediate stage companies requiring cleanroom facilities to grow and flourish. The Centre is housed in a high quality industrial building and contains five completely independent units comprising a cleanroom and adjoining office area. The Innotek Centre has been developed to provide growing technology companies with appropriately sized and specified accommodation to meet their business needs. The Innotek Centre is located in Livingston in Central Scotland. Construction began in January 2008 and the first units will be available from July 2008.

For more details: +44 (0) 1236 860 760 or mail@sematekgroup.com

If you are looking for incubation facilities in Southern England that can assist microelectronics companies we would recommend that you take a look at the [Millbrook Technology Campus](#) and the [SETsquared](#) organisation too. Of course NMI would be very happy to introduce you to the right people—just ask!

Untangle the legal maze *** Free Legal Assistance for NMI members

We'd like to remind you of this new and additional benefit to membership. A key aspect of successfully managing your legal and regulatory affairs is knowing that when you are faced with a potential legal issue you are able to assess the associated risks and the available options. In the absence of an in-house legal function, appointing specialist legal advisors quickly and efficiently may be desirable but, in practice, can be very difficult.

The new NMI legal assistance service provides members with:

- Up to 30 minutes' free and immediate specialist legal advice on all aspects of your business and contractual relationships.
- Direct access to lawyers by email or via a dedicated telephone.

A specialist legal team is available to advise you on a wide range of matters, including:

- Intellectual property ownership, protection and exploitation
- Commercial contracts, including supplier and agency agreements
- Employment issues including confidentiality agreements and restrictive covenants
- Software licenses and IT contracts
- Research and development
- Dispute resolution
- Corporate issues, including company sales and purchases
- Directors' duties

contact Jonathan Oddy at Manches jonathan.oddj@manches.com and Quote "NMI Legal Assistance"



R&D Tax Credits

If you are not aware of R&D Tax Credits or are considering using them to reduce the net costs of R&D activities you may find this case study on Wolfson Microelectronics useful as it contains tips gained through experience such as:

- Involve staff from the technical departments early
- Make sure technical managers that co-ordinate R&D activities are familiar with the main points of the rules
- Ensure you have procedures to collect and analyse expenditure on R&D.
- And of course, consult your tax advisers—remember that NMI has an "R&D Tax Clinic" service for its members.

Don't underestimate the impact of this scheme to your business, the case study highlights a **£230,000** credit received in 2005 under the scheme.

You can download the Wolfson Case Study from the [BERR website](#).
<http://www.berr.gov.uk/files/file34853.pdf>

NMI Outreach Programme — Calling all Members

At our AGM in November 2007 we proudly announced the launch of the NMI Outreach Programme. This has been a longer term ambition of ours and is intended to link NMI's work on the UK's innovation system into the wider global context. The primary aim of this activity is to promote UK capability and enhance collaborative efforts with NMI members into key regions around the globe.

We are already seeing encouraging signs that our early efforts are taking effect yet ultimately we're looking to play a key role in fortifying trade links for our members. We are working very closely with UK Trade and Investment offices within each region and are encouraged by the level of support and effort we have received to highlight the high calibre of activity that takes place here. Initially we have piloted efforts in Japan and USA (notably California) however, we are also interested in regions such as **Korea, Taiwan, China and Hong Kong** based on our members commercial interests.

We are at the early stages of "reaching out" to create a regular channel/gateway between the UK and these regions. NMI would like to hear from you if you are building links or have an established presence outside the UK as we are developing our programme in broader support of your own efforts. To do this effectively we'd like to get your views and insights on how we can add this wider support.

Contact john.moor@nmi.org.uk

Japan

Immediately following the AGM in November 2007 NMI conducted a promotional mission to Japan and met with senior industry figures and institutions. It has been clear to see that there is a good fit between UK technology and Japanese interests and a reciprocal visit to the UK took place in February.

As an outcome of the visit a set of 10 articles (including an interview with NMI) will be released to the Japanese technology press illustrating microelectronics activity here.

USA

In early March, NMI conducted a similar promotional mission to California and held meetings with the Wall Street Journal, leading academics at Stanford and UC Berkeley, VC's, and selected companies throughout the region that have interests with the UK both on the trade and supply side.

As a direct result of the visit we have been able to arrange a small number of customer meetings for our early-stage members and have made some useful introductions to VC's with some of our more developed members.

Requests For Technology

As a direct result of the Outreach Programme NMI has received specific requests for technology. Please contact us if your company can supply:

*** **Image recognition technology** (e.g. algorithms, hardware &/or software) that can distinguish objects such as faces or mechanical components etc.

*** **RF technology** for use in Mobile phones (prior stage to AFE and baseband)

*** **Memory Media** that can be used as a substitute for DVD's. Ideally this type of media will be more compact and not require a rolling mechanism

We cannot disclose full details at this stage however if you contact us we will connect you to the right people. [For more information contact us today.](#)

Raising Your Profile in California

SoC Conference

Newport Beach—October 2008

Having met the organisers of this conference (now in its 6th year), NMI has been invited to extend an invitation for speakers to its members - if your company is interested in promotional activities in this region and would like to speak [please let us know](#) and we'll support you—more on this in future updates.

See <http://www.savantcompany.com/SoC6-Nov08/main.htm>

New NMI Reports & Research



The 2007 Manufacturing Report

NMI's annual manufacturing report is now available and details our activities throughout 2007 with updates on Skills, Business Confidence, Benchmarking, Energy, Collaborations and NMI's "Mini Projects".

Also included in the report are the results of NMI member's satisfaction survey. Please [contact David.law@nmi.org.uk](mailto:David.law@nmi.org.uk) if you would like a copy.



Partnering the Future

So you think you know all there is about the subject of partnering? Well, you may know a great deal but the structural transformation of the industry that we've seen in recent times has opened up new possibilities.

Could an inspection of contemporary practice tell us anything about why some companies are performing so much better than others? Could it tell us something about the ability of SME's to weather industry cycles?

We think the answer is a resounding "yes".

If you are involved in strategy, policy or marketing we think that you should read this original research paper from NMI—it will enlighten you to the latest thinking on semiconductor business models

[NMI Members get a FREE copy](http://www.nmi.org.uk/sector_info/partnering_future_2008.htm)

http://www.nmi.org.uk/sector_info/partnering_future_2008.htm

**And Related to this is a Partner Event from SiliconSouthWest
Friday 9th May—Bath
Born Global—International Partnership Strategies for Start-Ups**

<http://www.siliconsouthwest.co.uk/>

Networks Update

A special thank you to all the people at **Wolfson** that helped us with one of our most ambitious technical network meetings to date: **Quality and Reliability 2008** Q&R is a rebranding of the original "FACR" network. The name change of the network puts an added emphasis on its purpose i.e. Quality. This years meeting became too big for our usual one day gathering and instead it straddled 2 days and combined technical presentations, a tutorial session, networking dinner and table-top exhibition.

We would also like to thank NMI Member **Oracle** for hosting us at our **Mission Critical Verification** event in February. We had approximately 80 registrations for the day and delegates had their first introduction to the Open Verification Methodology (a collaborative effort between Cadence and Mentor Graphics) as well as the **NMI verification road mapping** project where industry and academia work together to identify gaps in existing methodologies. The intended outcome is to formulate a coherent set of objectives for verification which could be subject to funded collaborative research. If you would like to know more and/or participate, [please contact us](#).



NMI's Paul Jarvie (centre) pictured here with Natalie Beal (VP of Quality) and Brian Whitson (Quality Manager) from Wolfson Microelectronics at this years Q&R network meeting in Edinburgh.

E-mail us at info@nmi.org.uk or call +44(0) 1506 401210



NMI ...The Network That Works

The National Microelectronics Institute (NMI) is the trade association representing the semiconductor industry in the UK and Ireland.

Its aim is to help build and support a strong semiconductor community by acting as a catalyst and facilitator for commercial and technological development.

A not-for-profit organisation funded by its members, the NMI has a membership that spans the supply chain and includes fabless semiconductor manufacturers, IDMs, foundries, design services, IP providers, research and academic institutions.

The NMI's work includes:

- Encouraging innovation, communication and collaboration through networking, brokering and sign-posting activities.
- Representing the microelectronics sector to government, policy makers and regulators.
- Supporting skills development, education and training.
- Helping to improve operational efficiency through benchmarking and best practice initiatives.
- Providing an industry specific information flow.

More information can be found at: www.nmi.org.uk



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