

Analog Skills Initiative Newsletter - December 2006

www.sli-institute.ac.uk/industry/asi_analog.htm



Welcome to the second edition of the quarterly Analog Skills Initiative (ASI) Newsletter. This has been forwarded to you as you have previously expressed an interest in analog and/or mixed signal design in Scotland.

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The Analog Skills Initiative (ASI) is supported by Scottish Enterprise to **promote growth and support analogue and mixed-signal design in Scotland.**

Find out more at: www.sli-institute.ac.uk/industry/asi_analog.htm

Current ASI News

- **Glasgow University's Electronic Design Centre**

The Department of Electronics and Electrical Engineering at Glasgow University has established a new Electronics Design Centre with £5.1M support from EPSRC and SFC. The aims of the EDC in teaching and research are to provide better linkage between diverse areas of technology that require electronics design. The research encompasses activities from fundamental work on the impact of nanometre CMOS technologies to applications led research into topics as diverse as millimetre wave imaging or the laboratory-in-a-pill that was pioneered in Glasgow.

The EDC has 23 staff including research students, research assistants and full-time academics, three of whom are new lecturer appointments. There is a particularly strong emphasis in developing the research environment to train engineers and provide support to UK industry. The University will shortly be launching a new MSc in Electronics Design that will significantly support these aims.

Although the EDC has only been in operation since the beginning of 2006 it has established new industrial sponsorship with IBM, Synopsys, Fujitsu, Qinetiq, Freescale, Wolfson, ARM and HMGCC. Key strengths are in

millimetre wave integrated circuit design, modelling of electronic and electromagnetic behaviours of devices and circuits, and heterogeneous system integration.

The EDC is currently equipping 400m² of new laboratory and design office space. Facilities include a wide range of general purpose test & measurement equipment, a near field RF anechoic chamber, an acoustic anechoic chamber, and on-wafer test up to 325 GHz. The EDC also boasts high performance computing as well as a host of smaller processor units and workstations. The EDC benefits from the University's new James Watt Nanofabrication Centre that enables many novel design concepts to be prototyped.

Further information about the Electronics Design Centre may be found on www.glasgowedc.org.

- **Tech Talks**

Tech talks are a range of events to make students aware in their earlier years of the facts round careers in analog. The events will be a series of one-off lectures including information on companies and their products. Freescale, Wolfson, Thales and National Semiconductors have all signed up to be involved in this.

Could your company sell a career in analog to an undergraduate? If so please contact Cade Wells at ISLI.

- **Edinburgh University's Analog Design Modules**

Dr. Martin Reekie of Edinburgh University gave an update on the ASI lectures and laboratory sessions at Edinburgh University at the last ASI meeting. The new courses have proved to be very successful with good student attendance and general feedback indicating they are well liked. In fact over 40 of the 4th Year MEng/BEng students are taking these labs which use Custom Analog CMOS chips for practical work and they are having the desired effect in generating enthusiasm for analogue design. 5th Year MEng labs are being developed. A presentation on the labs and custom chips can be found on the ASI website [here](#).

- **Glasgow University's M.Sc. in Electronics Design**

The EEE Department offers a Modular M.Sc. in Electronics and Electrical Engineering and a more specialised M.Sc. in Electronics Design. The M.Sc. degrees offer considerable opportunities for students to tailor their studies to their needs. Part time study options and industry scholarships are also available, and the course includes a small research project in one of the state-of-the-art laboratories in the Department. Existing modules include Analogue CMOS Design and Device Physics topics and future development based on industry input will add exposure to AHDL and Advanced Design and Robust Design Modules.

For further information: www.elec.gla.ac.uk/msc/

Participation in ASI

If you wish to discuss analog related topics please feel free to speak with any of our contacts or use our [Discussion Board](#) and if you want to get involved in our industry panel and help steer this initiative please register your interest with [Cade Wells](#).

Analog-related CPD Courses at iSLI

The range of upcoming analog related CPD courses at iSLI are:

Course	Trainer	Date
Essential High-Speed PCB Design November 2006	Robert Easson	28-30
Design for Testability Strategies for System-on-Chip and System-in-Package Technologies 2006	Prof. Andrew Richardson	4-6 December
Low-Noise Low-Power IC Design 2007	Willy Sansen	15-18 January
Design for Testability Strategies for Mixed Signal and Analogue Systems 2007	Andrew Richardson	13-15 February
Fundamentals of Mixed-Signal Testing 2007	Peter Lindholm	12-16 March

ASI Contacts:

For further general enquiries please use the following form:

http://www.sli-institute.ac.uk/industry/asi_enquiries_and_feedback.htm

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