

e-Futures: beyond Moore's Law

13 and 14 May 2013, organised by Professor David Cumming, Professor Steve Furber CBE FEng FRS and Professor Douglas Paul

DAY 1				DAY 2			
SESSION 1 Chair: David Cumming		SESSION 2		SESSION 3		SESSION 4	
		Chair: Steve Furber CBE FEng FRS		Chair: Douglas Paul		Chair: David Cumming	
09.00	Welcome by Julie Maxton & David Cumming						
09.05	Jo De Boeck Game changing technologies for life sciences	13.30	Giovanni De Micheli Nanosystems: technology, architectures and applications	09.00	Richard Soref Silicon-based silicon-germanium-tin heterostructure photonics	13.30	David Miller FRS Why interconnects are more important than logic
09.30	Discussion	14.00	Discussion	09.30	Discussion	14.00	Discussion
09.45	Andrew Mason Lab-on-CMOS bioelectrochemical microsystems	14.15	Rahul Sarpeshkar Ultra energy efficient systems in biology, engineering and medicine	09.45	Thomas Kazior Beyond CMOS: Heterogeneous integration of III-V Devices, RF MEMS and other dissimilar materials/devices with Si CMOS to create intelligent microsystems	14.15	Michal Lipson Ultra high speed photonics on – chip
10.15	Discussion	14.45	Discussion	10.15	Discussion	14.45	Discussion
10.30	Coffee	15.00	Tea	10.30	Coffee	15.00	Tea
11.00	Kazuo Nakazato Chemistry integrated circuit - integration of chemical system on CMOS integrated circuit	15.30	Florin Udrea CMOS - the future in gas sensors	11.00	François Simoens An innovative design of uncooled antenna and resonant cavity coupled bolometer array for terahertz real-time imaging	15.30	Edoardo Charbon Integrated photon-counting technologies: CMOS and beyond
11.30	Discussion	16.00	Discussion	11.30	Discussion	16.00	Discussion
11.45	Chris Toumazou FRS Disposable semiconductor healthcare devices: from digital plasters to DNA sequencing	16.15	Panel discussion/Overview (future directions)	11.45	Donhee Ham Solid-state and biological systems interface	16.15	Panel discussion/Overview (future directions)
12.15	Discussion	16.45	Discussion	12.15	Discussion	17.00	CLOSE
12.30	LUNCH	17.00	CLOSE	12.30	LUNCH		