



**Toshiba SoC technology and development platform are key to rapid development of DS2's next-generation, high performance 200Mbps powerline communications chipset**

**SoC design platform speeds time to market for latest IC from world-wide leading powerline communications specialist**

Toshiba Electronics Europe (TEE) has announced that the company's renowned process technology and its Universal Array™ system-on-chip (SoC) design platform have played a key role in the development of a next generation 200Mbps powerline communications (PLC) IC from DS2, the leading supplier of Universal Powerline Association (UPA) technology.

The DSS9101U SoC, part of DS2's new two-chip 'Aitana' solution, brings new levels of powerline performance to multimedia applications including home media networks, in-building LANs, and low and medium voltage powerline access networks. By basing its design on Toshiba's renowned process technology, DS2 has been able to combine high-performance, low-power operation with very high levels of integration for maximum on-board functionality.

The new IC was developed in conjunction with Toshiba's European LSI Design and Engineering Centre (ELDEC) in Düsseldorf. In order to minimise time from design concept to full production, ELDEC engineers used Toshiba's Universal Array SoC development platform. This flexible platform speeds development time and can accommodate design changes at much later stages in the process than conventional methodologies.

During the development of the IC Toshiba's engineers implemented a number of on-board features including the advanced custom ADCs and DACs that play a key role in helping the DSS9101U to deliver its 200Mbps operation. A high-performance PLL function and a variety of proven and qualified analogue IP blocks from Toshiba's IP library were also integrated within the chip.

Discussing the development, Jorge Blasco, president and CEO of DS2, comments: "From IPTV applications such as room-to-room HD video streaming to retail requirements for powerline adapters, the demand for high-performance powerline chips is growing rapidly. The guarantee of quality that comes with a Japanese brand like Toshiba was a critical factor for us. The combination of advanced, low power process technology, local engineering support, and a platform that dramatically cut development time were all key factors in selecting Toshiba as a partner in developing the next generation of IC to address this demand."

Armin Derpmanns, general manager of the System on Chip (SoC) Business Unit at TEE states: "Toshiba's advanced IDM business model is perfectly matched to the requirements of fabless chip makers such as DS2. Our local ELDEC engineers were well positioned to provide DS2 with the design, implementation, consultancy and project management support they needed, while the technology and design platform allowed DS2 to meet key criteria relating to performance, power, on-board functionality, cost and time-to-market."

Mr Tsutsui, senior manager from Toshiba Semiconductor Company, Custom SoC group in Japan adds: "Toshiba is committed to growing its custom SoC business and the DS2 development is a perfect example of how we are well placed to

support fabless chip companies at all stages of the design, development and manufacturing process.”

For more information on Toshiba Electronics Europe’s ASIC & Foundry Organisation in Europe, please visit: [www.toshiba-components.com/asic/](http://www.toshiba-components.com/asic/)

### **About Toshiba**

Toshiba Corporation is a leader in information and communications systems, electronic components, consumer products and power systems. The company’s integration of these wide-ranging capabilities assures its position as an innovator in advanced components, products and systems. Toshiba has more than 172,000 employees worldwide and annual sales of over US\$54 billion (FY2005).

Toshiba Electronics Europe (TEE) is the European Headquarters for the electronic components business of Toshiba Corporation, which is the world's fourth largest semiconductor vendor according to estimates by Dataquest.

Providing design, manufacturing, marketing and sales, TEE was formed in 1973 in Neuss, Germany. The company now has headquarters in Düsseldorf, Germany and subsidiaries in France, Germany, Italy, Spain, Sweden and the United Kingdom. Company president is Mr Ryoichi Shikama and the total number of personnel in Europe is around 400.

Toshiba Electronics Europe offers one of the industry's broadest IC and discrete product lines including high-end memory, microcontrollers, ASICs, ASSPs and display products for automotive, multimedia, consumer, telecoms and networking applications. The company also has a wide range of power semiconductor solutions.

For more company information visit Toshiba's web site at [www.toshiba-components.com](http://www.toshiba-components.com)

### **About DS2**

DS2 is the world's leading supplier of the 200Mbps technology that enables home networking and broadband access over power line, coaxial cable, and telephone wire. DS2 pioneered the industry with the introduction of its 200 Mbps chipsets, creating the fastest and highest performance solution for simultaneous data, digital audio and high-definition video transmission. Two pre-eminent industry groups, the Universal Powerline Association (UPA) and the European Union consortium OPERA (Open PLC European Research Alliance) have adopted DS2 technology in support of multi-vendor standard certified product. For more information, please visit [www.ds2.es](http://www.ds2.es)

**Contact details for publication:**

Toshiba Electronics Europe, Hansaallee 181, D-40549 Düsseldorf, Germany  
Tel: +49 (0) 211 5296 0 Fax: +49 (0) 211 5296 79254  
Web: <http://www.toshiba-components.com/pressoffice/index.asp>  
E-mail: [info@toshiba-components.com](mailto:info@toshiba-components.com)

**Contact details for editorial enquiries:**

Silke Daniels, Toshiba Electronics Europe  
Tel: +49 (0) 211 5296 197  
E-mail: [sdaniels@tee.toshiba.de](mailto:sdaniels@tee.toshiba.de)

Ann Whyte, DS2  
Tel: +34 (0) 96 136 60 04  
E-Mail: [ann.whyte@ds2.es](mailto:ann.whyte@ds2.es)

**Issued by:**

Simon Flatt/Andrew Town, Pinnacle Marketing Communications Ltd,  
Prosperity House, Dawlish Drive, Pinner, Middlesex, HA5 5LN, UK  
Tel: +44 (0) 20 8869 9229/9345 Fax: +44 (0) 20 8868 4373  
Web: [www.pinnacle-marketing.com](http://www.pinnacle-marketing.com)  
E-mail: [simon@pinnaclemarcom.com](mailto:simon@pinnaclemarcom.com) or [andrew@pinnaclemarcom.com](mailto:andrew@pinnaclemarcom.com)

**October 2007      Ref. 5729/A**