



## **Embedded World 2008 – Hall 9 Stand 219**

**ARM processor Starter Kit provides reference platform and software support for simplified development of industrial and consumer applications**

**Low cost, compact platform combines hardware and software for rapid evaluation and prototyping of embedded multimedia applications based on latest ARM microprocessor**

Toshiba Electronics Europe has launched a Starter Kit that will allow engineers to rapidly and cost effectively develop and prototype applications featuring the company's new TMPA910CRAXBG 32-bit ARM926EJ-S™-based microprocessor.

Believed to be the lowest cost tool in its category, Toshiba's BMSKTOPASA910 'Plug & Play' Starter Kit brings together all of the hardware and software needed to develop and test applications based on the TMPA910CRAXBG.

The Starter Kit's hardware development PCB measures just 110mm x 150mm. In addition to the TMPA910CRAXBG processor,

onboard functionality includes a 3.5-inch display with a touch screen, Ethernet connectivity, a 480Mbps USB 2.0 interface and an RS232 connector. An audio DAC, connected to the processor I<sup>2</sup>S bus, provides the ability to output excellent sound quality, while board memory comprises 512MBit SDRAM, 256Mbit NOR Flash and 2Gbit NAND Flash. An SD card socket facilitates the use of portable storage.

Tools are available from third party suppliers (e.g. as trial versions), while extensive software support for graphics libraries and embedded operating systems is also guaranteed via third parties such as SEGGER ([www.segger.com](http://www.segger.com)). The CD-ROM supplied with the Starter Kit includes schematics and PCB layout data, which can be freely re-used. The board features a JTAG interface for ease of debugging and can be supplied with a wide variety of software examples to further speed the development and prototyping process.

Based on the ARM926EJ-S™ CPU core operating at up to 200MHz, the new TMPA910CRAXBG uses a seven layer multibus architecture. This architecture significantly improves performance compared to other devices operating at similar processor speeds. The built-in LCD controller offers support for TFT and STN display sizes up to 1024 x 1024 pixels. An LCD data processor accelerator delivers image scaling, filtering and blending functions and offers real time processing for movies at speeds up to 30 frames per second.

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## **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, Italy, Spain, Sweden and the United Kingdom. Company president is Mr 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)

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