

Toshiba Announces New Camera and Display Bridge Chips for Mobile Devices

Bridge Chips Provide Up to 800 Mbps Data Throughput Performance for High-Resolution Displays and Cameras

Mobile World Congress, February 15, 2010 – [Toshiba Electronics Europe](#) today announced availability of three new bridge chips for use in mobile phones, a Mobile Industry Processor Interface (MIPI®) camera serial interface (CSI) to a Mobile Display Digital Interface (MDDI®) chip (part number TC358740XBG) and two MDDI-MIPI display serial interface (DSI) chips (part numbers TC358760XBG and TC358761XBG). These products provide high-speed serial interfaces between a mobile phone's baseband or application processor and the phone's display or integrated camera and are a requirement for high-resolution displays and cameras used in smartphones, mobile internet devices, netbooks, smartbooks and other high-performance mobile devices. They are the latest additions to Toshiba's Embedded Mobile Peripheral SoC line up.

Smartphones and other mobile devices have become increasingly feature rich, supporting functions like high-definition video, 3D graphics, high-resolution still image and video capture and even video conferencing. With their support of high-speed MIPI and MDDI interfaces, Toshiba's new bridge chips will allow customers to design mobile devices that can easily handle high-bandwidth communication between the phone's display, camera and baseband or application processor, giving consumers an uncompromised video experience.

The TC358740XBG camera bridge chip provides connectivity for MIPI cameras to baseband or application processors using an MDDI interface. The bridge chip supports MDDI 1.2 Type 2 on the Host side. The device offers support for up to two cameras, with the primary camera using a MIPI link and the secondary camera using a MIPI link or parallel port. The bridge enables high-speed serial interfaces on both the Host via MDDI and camera side via MIPI CSI-2 allowing support for up to 12 megapixel primary camera and up to 2 megapixel secondary camera in one handset. It is compatible with systems using baseband processors with an MDDI interface.

The Toshiba TC358760XBG and TC358761XBG display bridges are optimized for mobile handsets using an MDDI high-speed serial digital packet host interface and provide connectivity of MIPI display panels to baseband or application processors using an MDDI interface. They are based on the MDDI 1.2 Type 1 and MIPI DSI 1.01 interfaces, but are backward compatible with MDDI 1.1. They support direct refresh through the MDDI link. In addition, the TC358761XBG offers support for legacy parallel interfaces such as a MIPI DPI and an MIPI DBI on the host side or the panel side, allowing re-use or extended use of existing design and components. These devices are compatible with systems using baseband processors with an MDDI interface.

Availability

Engineering samples of the TC358761XBG display bridge chip and the TC358740XBG camera bridge chip are available now. Engineering samples of the TC358760XBG display bridge will be available April, 2010. Mass production for TC358740XBG is scheduled to begin 3rd quarter, 2010. Mass production for TC358760XBG and TC358761XBG is scheduled to begin 4th quarter, 2010.

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MIPI is a licensed trademark of MIPI Alliance, Inc in the U.S. and other jurisdictions. MDDI is a registered trademark of the Video Electronics Standards Association (VESA).

About Toshiba

Toshiba Electronics Europe (TEE) is the European electronic components business of Toshiba Corporation, which is ranked among the world's largest semiconductor vendors. TEE 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, industrial, telecoms and networking applications. The company also has a wide range of power semiconductor solutions. TEE was formed in 1973 in Neuss, Germany, providing design, manufacturing, marketing and sales and now has headquarters in Düsseldorf, Germany, with subsidiaries in France, Italy, Spain, Sweden and the United Kingdom. TEE employs approximately 300 people in Europe. Company president is Mr. Hitoshi Otsuka.

Toshiba Corporation is a world leader and innovator in pioneering high technology, a diversified manufacturer and marketer of advanced electronic and electrical products spanning information & communications systems; digital consumer products; electronic devices and components; power systems, including nuclear energy; industrial and social infrastructure systems; and home appliances. Founded in 1875, Toshiba today operates a global network of more than 740 companies, with 199,000 employees worldwide and annual sales surpassing US\$73 billion.

For more information visit Toshiba Electronics Europe's web site at www.toshiba-components.com

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