Samsung Display Driver IC with Built-in MDDI Optimizes Display Interface for 3G Mobile Handsets

June 30 2005

Samsung Electronics Co. Ltd., a leader in advanced semiconductor technology, today announced that the company has developed an optimized QVGA display driver IC (DDI) chip that incorporates QUALCOMM's Mobile Display Digital Interface (MDDI). By including this serial interface technology, Samsung's new S6D0142 DDI chip reduces the number of wires that run across the hinge of wireless 3G clamshell handset designs to interconnect QUALCOMM Mobile Station Modem chipsets with the LCD display. Mobile handsets with Samsung's new S6D0142 DDI chip will also be more reliable due to a simplified

design.

The MDDI standard, a high-speed serial interconnection technology developed by QUALCOMM, increases reliability and reduces power consumption in clamshell and slide mobile phones by greatly decreasing the number of wires.

Low Voltage Differential Interface (LVDI), which distinguishes signals by the difference of voltage of the two wires, lowers Electro Magnetic Interference (EMI) as well as reducing the power consumption.

In addition to the built-in MDDI display interface, Samsung's latest display driver IC, the S6D0142, incorporates the following features in a single chip: a timing controller, a source driver, a gate driver, a power supply IC, and 1.3Mb of SRAM.

"With mobile devices supporting a variety of value-added multimedia functions and delivering an increased amount of data, the need for high-speed serial interface is on the rise," said Jin-tae Kim, vice president of Display Driver Development Team at Samsung Electronics' System LSI Division. "At the same time, the actual size of mobile devices is decreasing. We've taken the next step in the evolution of MDDI enabled ICs."

Strategy Analytics, a wireless industry analyst firm, expects the mobile clamshell phone market to reach over 304 million units by 2006.

The S6D0142 will be available for select customers by Q3 of 2005 and available to worldwide manufacturers by Q4 of 2005.

Citation: Samsung Display Driver IC with Built-in MDDI Optimizes Display Interface for 3G

Mobile Handsets (2005, June 30) retrieved 23 April 2024 from
https://phys.org/news/2005-06-samsung-driver-ic-built-in-mddi.html