Industry's First Deployment of the Mobile Display Digital Interface (MDDI) Solution for Wireless 3G CDMA Clamshell Phone

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Samsung Electronics Co. Ltd., a leader in advanced semiconductor technology, and QUALCOMM Incorporated (Nasdaq: QCOM), pioneer and world leader of Code Division Multiple Access (CDMA) digital wireless technology, today announced the industry's first deployment of the Mobile Display Digital Interface (MDDI) technology, which supports the Video Electronics Standard Association (VESA) standard.

The MDDI standard, an optimized high-speed serial interconnection technology developed by QUALCOMM, increases reliability and reduces power consumption in clamshell phones by decreasing the number of wires that run across the handset's hinge to interconnect the digital baseband controller with the LCD display. This reduction of wires also allows handset OEMs to reduce development costs by simplifying clamshell or sliding handset designs.

MDDI is integrated into QUALCOMM's Mobile Station Modem™ (MSM™) baseband chipsets, starting with the MSM6150™ and MSM6550™ chipsets; Samsung's S3CA460 LCD controller is designed to utilize the MDDI technology to inter-communicate with the MSM. QUALCOMM's MSM6150 and MSM6550 CDMA baseband modem chips directly connect with Samsung's S3CA460 graphics LCD controller through the MDDI link.

“As multimedia functionality supporting high resolution photos and

video in mobile products increases, new solutions are required to overcome the constraints imposed by parallel display interfaces used today," said Yun-Tae Lee, vice president of product planning for Samsung Electronics' System LSI Division. "By incorporating MDDI-compliant technology, cell phone manufacturers can reduce the power consumption, EMI and production cost of their products while using a smaller cable to connect the upper and lower halves of their clamshell or slider phone designs."

"QUALCOMM is pleased to work with Samsung to deliver the industry's first proven MDDI solution to optimize clamshell phone designs for color LCD connectivity," said Luis Pineda, vice president of marketing and product management for QUALCOMM CDMA Technologies. "As demand for high- speed multimedia applications over CDMA networks increases, MDDI provides handset manufacturers with a lower-cost, lower-power interface solution that reliably delivers dynamic mobile media."

MDDI is a high-speed digital packet serial interface, which allows for bi-directional data transfer and has a maximum bandwidth of up to 3.2 Gbits per second. This allows designs using up to 90 wires to interconnect the upper and lower clamshell through parallel interfaces to be reduced significantly. MDDI requires a minimum of just four wires plus power. MDDI will enable low-power, high-speed graphics performance for advanced multimedia clamshell phones equipped with high-resolution LCD displays.

Samsung's S3CA460, featured in both CoF (Chip on FPCB) and FBGA packaging, is the first graphics LCD controller to be MDDI-enabled. It includes an integrated dual controller for both a main and sub- LCD panel, internal frame buffer for both panels for power saving, multiple power modes, and other peripheral support. The MDDI interface technology will be integrated into QUALCOMM's Enhanced Platform

and Convergence Platform chipsets beginning with the MSM6150 and MSM6550 chipset solutions.

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

Product Availability

Samsung is currently sampling the S3CA460 LCD controller. The sample shipment of QUALCOMM's MSM6150 and MSM6550 chipset solutions began in June 2004. Samsung will exhibit the S3CA460 at Expo Comm Wireless Japan 2004 in Tokyo on July 21 -23, 2004.