Epson, E Ink Develop Breakthrough Controller IC for Electronic Paper Displays

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Seiko Epson and E Ink today announced a jointly developed display controller IC enabling new capabilities for E Ink's Vizplex enabled electronic paper displays. EPD low-power consumption screen technology is driving an emerging class of new mobile applications, such as eBooks, eNewspapers, tablet PCs, laptop secondary displays, eNotebooks, and eDictionaries.

The new EPD controller IC (part number S1D13521B) was developed by combining technologies from both Epson and E Ink. It will be offered in production quantities by Epson and as part of E Ink's upcoming AM300 Broadsheet prototype kit.

The Epson display controller will bring greater functionality to EPDs using E Ink technology by speeding up the user interface via seamless

navigation, drop down/popup menus, responsive cursors and real-time keyboard entry. The controller enables the display to perform up to 16 tasks in parallel, and supports smooth and responsive pen input devices for annotations and sketches.

"Epson developed the powerful S1D13521 with E Ink to support new ePaper applications such as electronic newspapers, portable web browsers and industrial tablets," said Russ Wilcox, President and CEO of E Ink. "With the ability to address many screen regions simultaneously, future devices using this chip could offer a fast menu interface, simple animations, higher grayscale levels, and user input through typing and touch."

Epson's controller IC's functionality is fully enabled when integrated into a display solution utilizing a host controller, tuned waveforms, and E Ink's Vizplex-enabled active matrix electrophoretic displays. Its ability to perform regional updates contributes to a more responsive screen for both input and output usage. Samples of the Epson S1D13521B will be available in May 2008. Production quantities will be available in August 2008. Sample price is $18.

The Broadsheet AM300 prototype kit being offered by E Ink is the fastest way to start working with E Ink technology using the Epson EPD controller. The Broadsheet kit will enable engineers to rapidly prototype and develop next generation ePaper products. Compatible with 5-in., 6-in., 8-in., and 9.7-in. active matrix displays, the kit allows users to quickly create functional, low-profile product mock-ups using the kit's modular design. The AM300 will be shipping in June.

Source: Epson