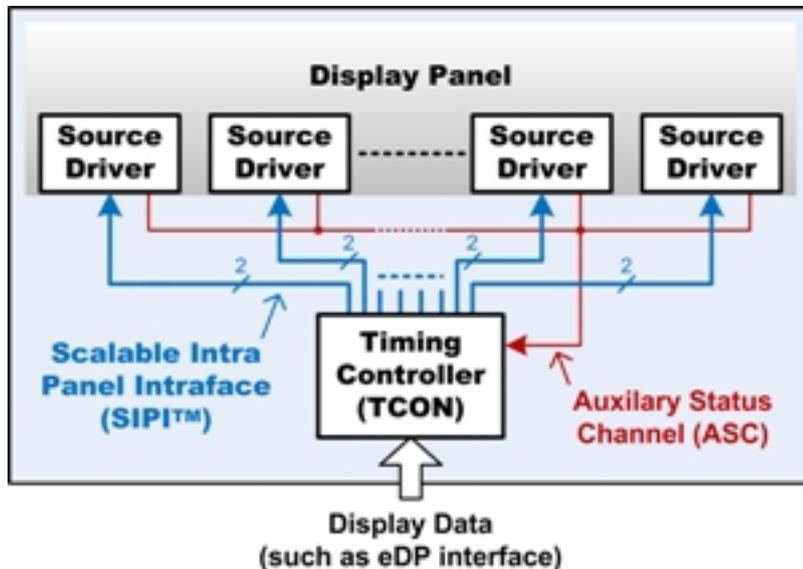


Scalable Intra Panel Interface achieves high data rate



Parade Technologies Ltd.

announced a new type of point-to-point high speed interface for use within LCD display panels. The new Scalable Intra Panel Interface, or SIPI, achieves high data rate, low power use, and reduced interference with embedded system wireless services to meet the challenging demands for ultra-thin, high pixel density mobile displays.

SIPI provides advantages over the intra panel interfaces in common use today, including the mini-LVDS (mini Low Voltage Differential Signaling) interface and other existing intra panel interface standards. Instead of relying on a separate data clock signal, SIPI incorporates an embedded data clock through use of 8B/10B data encoding and, in addition, data scrambling is applied. The combination of 8B/10B encoding and data scrambling greatly reduce EMI and RFI (Electromagnetic Interference and Radio Frequency Interference). This addresses the ongoing challenge of inference with embedded wireless services, including GPS services, especially as systems get smaller and display resolutions increase.

SIPI was designed to be scalable with microchip technology by enabling support for decreasing supply voltages as process geometries continue to shrink in display panel chips. SIPI is also compatible with Chip-On-Glass (COG) technology, which panel makers are increasingly adopting to meet the demands of the thin-and-light mobile system market.

Another unique feature of SIPI is a one-wire Auxiliary Status Channel (ASC) that provides back-channel communication from the source/column driver SIPI receiver to the TCON. Through its ability to report the data error rate at the SIPI receiver, ASC facilitates automatic panel and system-level testing during manufacturing, as well as system debugging and status checking.

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SIPI will be featured as an output interface on future Parade TCON chips, and will be supported by future source/column driver chips. LCD display panel prototypes incorporating SIPI are expected to be available in late 2012.

Parade Technologies is publishing a paper on SIPI at the SID (Society for Information Display) Display Week 2012, being held June 3-8 at the Boston Convention and Exhibition Center, and is also giving an oral presentation at the event.

Parade Technologies Ltd.

<http://www.paradetech.com>. [1]

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