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Welcome to Volume 5, Issue 3 of *Reflexions Newsletter* (formerly *The Liquid Crystal Twist*). *Reflexions* brings you the latest information about Kent Displays Reflex™ No Power LCD technology including advancements, new/upgraded products, featured applications, customer success stories, special offers and more!

Reflex LCDs on Top Shelf for Electronic Labels

Low Cost, No-Power Image Retention, and Superior Optical Characteristics Make Reflex LCDs Increasingly Popular for Electronic Shelf Label Applications



- No power image retention
- Excellent readability without backlighting
- Multiple sizes, color combinations, resolutions and electronics configurations
- Bar Code Scannable*

Reflex LCD Modules are becoming an increasingly popular display choice for electronic shelf label (ESL) manufacturers. Reflective and bi-stable, and with many options from which to choose, Reflex LCDs will help you overcome the traditional ESL adoption barriers of price and power consumption. Reflex displays require no power to retain an image and only minimal power from a small battery for updates. Reflex LCDs also provide superior optical characteristics for excellent readability (without backlighting) and bar code scanning*: *high contrast/brightness, wide viewing angles, and no polarizers or filters.*

Available on glass substrates, and in a variety of standard and custom sizes, Reflex LCDs will integrate seamlessly into your ESL design. Contact us today with your requirements.

* Select color combinations and resolutions.

INFOSIGN PROVIDES CURBSIDE BUS STATUS IN BARCELONA

Have you ever waited for a bus that never seems to come – and had no way of knowing when it would? Riders in Barcelona, Spain will no longer experience that frustration thanks in part to the Kent Displays InfoSign LCD Digital Sign.



Barcelona's Metropolitan Transportation Authority (EMT) tried for years to add an automated, poll-mounted status system to bus shelters, but the cost was prohibitive (about € 15,000 each). Supplying electricity to the system, which required digging up streets, was the biggest cost component.

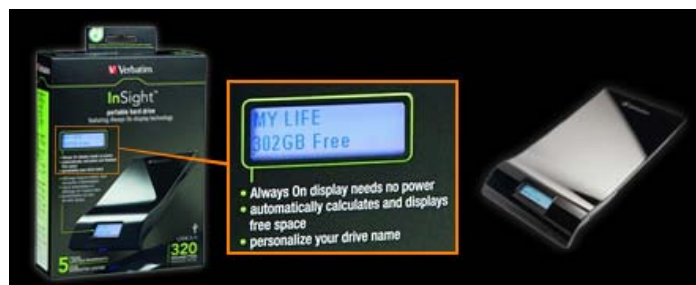
To overcome this obstacle, the EMT turned to Capmar, a local steel fabricator, and the Istituto Europeo di Design to engineer a wireless status system powered by solar energy. Capmar contacted Kent Displays to source no power information displays (InfoSign) for the system.

The solar-powered status system met EMT's cost objective at approximately € 3,000 each. In addition to Barcelona, 18 other metropolitan municipalities of the state now plan to install the systems over the next four years. System cost is expected to further decrease with a larger order.

VERBATIM USES REFLEX 128X32 LCD AS LABEL FOR NEW INSIGHT HARD DRIVE

The new Verbatim InSight hard drive looks different than almost any other hard drive currently on the market. In addition to its slim, piano black case, the integrated, always-on LCD is gathering much attention.

Kent Displays is especially fond of the LCD, our Reflex 128x32 glass display. Charlie White of the Web site DVICE also appears fond of it. In his recent



review of the drive, he and his co-workers were “so mildly astonished with this feature that we named the drive WTF.” (their name, not ours)

The display shows the drive name as entered in My Computer (Windows) or Finder (Mac) and the free space remaining on it. This information remains displayed without power when the drive is disconnected from the computer. The days of guessing what’s on a disconnected drive, or how much space remains, are over!

The Insight hard drive can be purchased at Best Buy and other electronics retailers.

ENOCEAN INTEGRATES REFLEX LCDS INTO SELF-POWERED WIRELESS SENSORS

Because of their limited energy budget, self-powered wireless sensors normally don’t have displays to present information numerically or graphically. However, German sensor maker EnOcean felt an integrated display would help expand the applications for its world leading line of self-powered wireless sensors. EnOcean came to Kent Displays for a no power display solution. For the temperature sensor above, they chose a Reflex 100x1 segmented display. Both the temperature setpoint and the current temperature values are shown.

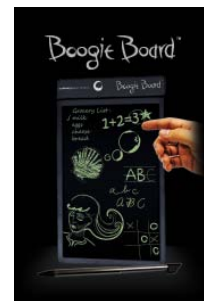


EnOcean is a world leader in providing self-powered wireless solutions for buildings automation. EnOcean technology based products are installed into more than 100,000 buildings worldwide.

ENOTE LCD WRITING TABLET LAUNCH MOVED TO LATE 2009

We’ve written about the eNote LCD Writing Tablet many times, including its anticipated availability in fall 2009. That date has now changed to the end of 2009. The reason for the change was name related.

While we like the eNote name, we really think a product this unique deserves a very unique name. To come up with that name, we engaged one of the top naming and branding companies in the U.S., Igor. With their guidance, we have renamed the eNote LCD Writing Tablet the Boogie Board™ LCD Writing Tablet. The Boogie Board tablet will be sold under the company name Improv Electronics. It will have its own Web site, www.myboogieboard.com (the OEM version of the tablet will remain on www.kentdisplays.com).



So, what makes the Boogie Board tablet so unique? The Boogie Board tablet is the tree-friendly electronic alternative to paper, pencils, and pens! Simply press on the surface with the included stylus or other suitable writing instrument (even your finger) to create an image and then erase with the push of a

button. Practice handwriting, arithmetic and drawing (great for young and developmentally challenged students), write memos, make shopping lists, sketch ideas, keep score, and diagram plays. It has so many uses, before you know it, you'll say goodbye to paper forever!

The Boogie Board tablet easily slips into a briefcase or back pack for use at school, office, car, or even the athletic field. Keep one by the phone at home to leave notes for family members, make to do lists and more.

To be notified as soon as the Boogie Board LCD Writing Tablet is available for purchase, go to www.myboogieboard.com.

CTO KHAN PROFILES COLOR EREADER DISPLAY TECHNOLOGY AT EMTECH

Dr. Asad Khan, Kent Displays Chief Technical Officer, recently participated on a panel of display industry experts discussing the future of eReader displays. The discussion was part of the EmTech conference held at MIT in Boston.

Dr. Khan provided a broad perspective on eReader displays, including the fact Kent Displays was the first to market a color eReader display through a license agreement for the Fujitsu FLEPia eReader.



Like all Kent Displays products, the FLEPia is based on Reflex™ display technology. This technology uses a layer of microcapsules containing cholesteric liquid crystal, which has a helical structure that can be rendered transparent or reflective by switching an applied voltage. The FLEPia produces full color using a stacked color architecture with separate red, green and blue layers. Kent Displays is developing numerous other color eReader display architectures including a spatial architecture with all color crystals placed side-by-side on one layer.

Dr. Khan next focused on the bi-stability of all Reflex displays, an essential characteristic of eReader displays. A bi-stable display draws power only when the image changes. No power is required to retain an image. Bi-stability allows an eReader to be used for weeks without recharging. Kent Displays has also demonstrated use of a solar backplane for Reflex displays, which will allow an eReader to continuously recharge without plugging it in to a receptacle.

In summary, Dr. Khan predicted full color displays will soon displace their grayscale predecessors in most eReaders. Which color technology and architecture will become the defacto standard remains to be seen. Regardless, Kent Displays will be at the forefront of reflective, bi-stable color display innovation.

UPCOMING EVENTS

China Hi-Tech Fair

- **Nov 16–21 2009**
 - Shenzhen Convention & Exhibition Center Hall 2
 - Shenzhen, China
Exhibit
-

Printed Electronics USA

- **December 2–3, 2009**
 - McEnery Convention Center
 - San Jose, CA, USA.
Presentation
 - Flexible Bistable Reflex Displays and Applications (Joel Domino, President)
-

Flexible Electronics and Displays Conference

- **February 1–4, 2010**
 - Pointe Hilton Squaw, Peak Resort
 - Phoenix, AZ, USA.
Presentation
-

INDUSTRY BUZZ

"We really like the ability to name the drive and have it show up on the internal display on the drives front...No more running out of space in middle of a video project or loading .mp3 music."

- product review of Verbatim InSight Portable Hard Drive

ASK ABOUT CUSTOM DESIGNS

You dream it, we'll build it. We design and manufacture custom LCD modules to meet your specific needs - from your initial ideas to product integration and the service inbetween. Contact us with your requirements.



* Minimum Order 10,000