

Color Electronic Paper

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Abstract

Electronic paper offers all the same characteristics as paper such as being thin and lightweight. It also boasts low power consumption in that it does not require electricity except during screen image changes, making electronic paper especially suited for advertisements or information bulletins in public places for which paper is currently used. Electronic paper is especially convenient for use on curved surfaces, such as columns. In addition, electronic paper can be conveniently used in conjunction with mobile devices as an easy-to-read and portable display device.

Technology

- **No electricity required for continuous display, minimal power consumption when changing screen image**
Features an image memory function that enables continuous display of the same image even when electricity is turned off; therefore no electricity is required for continuous display. Screen image can be changed using minimal electricity consumption equivalent to the weak radiowaves used in contactless IC cards.
- **High-level display performance**
The new electronic paper is constructed of three displaying layers - red, blue and green. Since no color filters or polarizing layers are required, it features color that is significantly more vivid than conventional reflective-type LCDs. Because the screen image does not require repetitive updates to be maintained, the screen does not flicker.
- **Film substrate**
The film substrate employed in Fujitsu's new electronic paper can be thin and lightweight, thus significantly widens the range of potential applications.

Application Examples

- Transit advertising on trains, information displays on curved surfaces, and other public display applications that could take advantage of its light weight and flexibility. Information displayed can be updated based on the time of day, enabling more effective advertising and informational signage.
- Electronic shelf display tags, point-of-purchase displays, restaurant menus, and other in-store uses. Can also be used for pricing displays or product information displays that stand out in full color and can be readily updated.
- Text or images from mobile phones or other mobile devices can be transferred wirelessly to larger displays for easy viewing.
- Use in the home can offer more convenient digital-media devices that can be carried from room to room.



Portable information terminals