

# E INK PEARL IMAGING FILM™

## ACTIVE MATRIX MONOCHROME ELECTRONIC PAPER DISPLAYS

### Pearl Visual Performance

Display Type	Reflective electrophoretic
Imaging Component	E Ink Pearl Imaging Film
Colors	Black, White, Grayscale
Contrast Ratio	10:1 (minimum)
White State	70 (minimum)
Dark State	24 (maximum)
Bit Depth	4-bit gray, 16 levels
Reflective	40.7% (minimum)
Viewing Angle	Near 180 degrees
Image Update Time	120 milliseconds (1 bit)
Update Modes	Page, Menu, Pen, Animation

### Module Drive Electronics

Switching Voltage	+/- 15 volts
Drive Method	Active Matrix TFT
Electronic Partners	Epson
	Texas Instruments
	Marvell
	Maxim Semiconductor
	Freescale Semiconductor
	Dialog Semiconductor

### Module Environmental and Lifetime Characteristics

Operating Temp. Range	0 to 50 degrees Celsius
Storage Temp. Range	-25 to 70 degrees Celsius
Service Life	50k hours

### Module Display System

Available Display Sizes	2 to 12 inches
Display Thickness	1.2 mm
Resolution	Capabilities exceed 200 DPI
Aspect Ratio	Typical eBooks use 4:3

### BENEFITS:

Enhanced Readability

Improved Speed

Lowest Power

E Ink Pearl Imaging Film expands the capabilities of reflective displays. With the whitest reflective display in the industry, and a contrast range now 50% greater than previous products, Pearl text "pops" from the page, enabling a reading experience most similar to reading text on the printed page. Reading is also faster and more natural, as consumers can now turn pages in a fraction of the previous rate.

### APPLICATIONS

E Ink Pearl Displays are ideal for a variety of dynamic content applications including:

- eBooks
- Wireless devices
- Health & Fitness displays
- Watches
- Thermostats
- Mobile point of sale units
- In-store signage