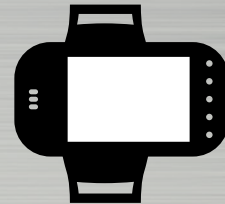
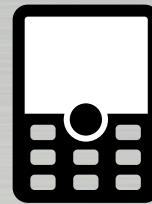
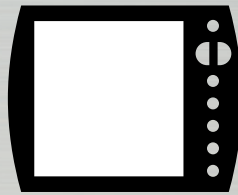


SHARP®

The Sharp Memory LCD Suite

Memory in every pixel allows for rich content on a small display – with ultra-low power consumption.



Consumers continue to demand greater sophistication and functionality in electronic products – including those with small displays. Sharp's Memory LCD technology delivers a high-contrast, high-resolution display that enables dense content and eliminates many of the design issues of yesterday's low-power LCD technology standards.

Memory LCD Technology

In Sharp's latest LCD design breakthrough, active matrix technology is combined with a one-bit memory circuit embedded into every pixel, so that information is retained once it's written. This allows you to design products with ultra-low power consumption and long battery life. The Memory LCD is fast and flexible enough to display motion video and scrolling text, as well as static images, with no image retention.

A lightweight, two-glass design with an integrated driver on the panel delivers a thin display that's a perfect solution for compact product profiles. Incorporating the Memory LCD into your design is simple with a 3-wire SPI serial interface (SI, SCS, SCK).

Sharp's Memory LCDs provide a perfect solution for these applications and more:

- Mobile phones
- Remote controls
- Performance tracking devices
- Smart utility meters
- Medical monitoring devices
- Wristwatches
- Fish finders
- White goods
- Retail tags
- Any product with a battery

1.26-inch (diagonal) Memory LCD

HR-TFT Monolithic Portrait Transflective Display

Part Number	LS013B7DH01
Pixel Format	144 × 168
Outline Dimensions (mm)	24.88 × 33.00 × 1.64
Active Area (mm)	20.88 × 24.36
Dot Pitch (mm)	0.145 × 0.145
Input Voltage	5 V
Interface Type	3 V serial
Reflectance	14.5%
Power Consumption*	60 μW
Connector	Elastomeric
Operating Temp. Range	-20 to +70°C

1.28-inch (diagonal) Memory LCD

HR-TFT Square Transflective Display

Part Number	LS013B7DH03
Pixel Format	128 × 128
Outline Dimensions (mm)	26.6 × 30.3 × 0.746
Active Area (mm)	23.04 × 23.04
Dot Pitch (mm)	0.18 × 0.18
Input Voltage	3 V
Interface Type	3 V serial
Reflectance	18%
Power Consumption*	60 μW
Connector	FPC
Operating Temp. Range	-10 to +60°C

1.35-inch (diagonal) Memory LCD

PNLC Square Reflective Display

Part Numbers	LS013B4DN01 LS013B4DN02
Pixel Format	96 × 96
Outline Dimensions (mm)	28.2 × 32.34 × 1.4
Active Area (mm)	24.192 × 24.192
Dot Pitch (mm)	0.252 × 0.252
Input Voltage	5 V
Interface Type	3 V serial
Reflectance	50%
Power Consumption*	15 μW
Connector	Elastomeric or FPC
Operating Temp. Range	-20 to +70°C

2.7-inch (diagonal) Memory LCD

HR-TFT Landscape Transflective Display

Part Number	LS027B7DH01
Pixel Format	400 × 240
Outline Dimensions (mm)	62.8 × 42.82 × 1.4
Active Area (mm)	58.8 × 35.28
Dot Pitch (mm)	0.147 × 0.147
Input Voltage	5 V
Interface Type	3 V serial
Reflectance	18%
Power Consumption*	50 μW
Connector	FPC
Operating Temp. Range	-20 to +70°C

4.4-inch (diagonal) Memory LCD

HR-TFT Landscape Transflective Display

Part Number	LS044Q4DH01
Pixel Format	320 × 240
Outline Dimensions (mm)	94.8 × 75.2 × 1.53
Active Area (mm)	89.6 × 67.2
Dot Pitch (mm)	0.280 × 0.280
Input Voltage	5 V
Interface Type	3 V serial
Reflectance	17.5%
Power Consumption*	250 μW
Connector	FPC
Operating Temp. Range	-20 to +70°C

*with a static image

Sharp technical support includes dedicated experts in your region who are ready for your call. Our mission is to help you reduce development time and get to market more quickly. Have questions? Sharp answers.

For more information, visit www.sharpmemorylcd.com.

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