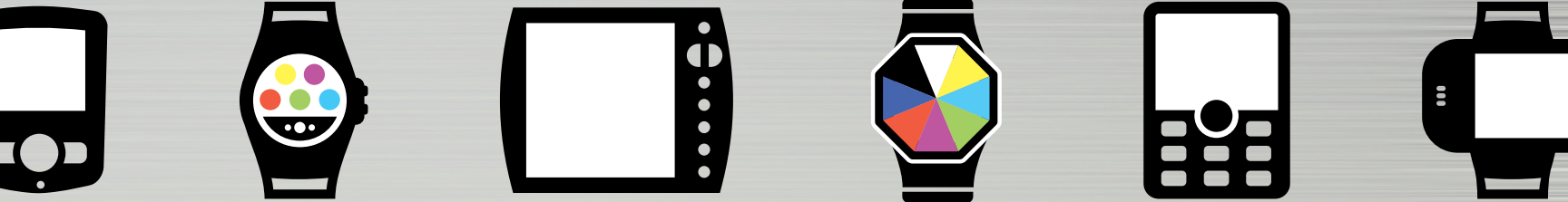


## The Sharp Memory LCD Suite

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



**High resolution.**  
**Long battery life.**  
**Thin, lightweight design.**



The Memory LCD is the perfect solution for compact handheld, wearable, and other small-screen applications.

This year, Sharp introduces its new 8-color Memory LCD. This module's ultra-low power consumption helps your products deliver long battery life. It also enables “always-on” performance to show a full array of data at a glance (i.e., without the need to “fire-up” a smartwatch or similar device). Look for more Color Memory form-factors and features, coming soon.



## Memory LCD Advantages

### Ultra-Low Power Consumption

- No data refresh for still images
- Reflective (no backlight)

### Excellent Display Quality

- High resolution/contrast/reflectivity
- Readable in any lighting condition
- Wide/symmetrical viewing angle

### Thin Profile

- Smaller finished products

### Simple Interface/Connectivity

- 3-wire serial interface
- Single power supply
- Few peripherals

### Fast Image Refresh Time

- Scrolling letters
- Image capability

### Resistance to Vibration

- Up to 1.5 G - 2 G

## 0.99-inch (diameter) Memory LCD

HR-TFT Octagonal Transflective Display

Part Number	LS010B7DH01
Pixel Format	128 × 128
Outline Dimensions (mm)	33.0 × 33.0 × 1.64
Active Area Diameter (mm)	25.024
Dot Pitch (mm)	0.1955 × 0.1955
Input Voltage	5 V
Interface Type	3 V, 3-wire Serial
Reflectance	17%
Power Consumption*	10 μW Static, 45 μW Dynamic
Connector	FPC
Operating Temp. Range	-20° to +70°

## 1.02-inch (diagonal) Memory LCD

HR-TFT Landscape Transflective Display

Part Number	LS010B7DH02
Pixel Format	96 × 150
Outline Dimensions (mm)	18.5 × 28.5 × 1.65
Active Area (mm)	13.92 × 21.75
Dot Pitch (mm)	0.145 × 0.145
Input Voltage	3 V
Interface Type	3 V Serial
Reflectance	14.5%
Power Consumption*	TBD
Connector	TBD
Operating Temp. Range	TBD

## 1.17-inch (diagonal) Memory LCD

HR-TFT Transflective Display

Part Number	LS012B7DD01
Pixel Format	184 × 38
Outline Dimensions (mm)	35.1 × 11.0 × 0.741
Active Area (mm)	29.072 × 6.004
Dot Pitch (mm)	0.158 × 0.158
Input Voltage	3 V
Interface Type	3 V, 3-wire Serial
Reflectance	15%
Power Consumption*	15 μW Static, 150 μW Dynamic
Connector	FPC
Operating Temp. Range	-20° to +70°

## 1.26-inch (diagonal) Memory LCD

HR-TFT Monolithic Portrait Transflective Display

Part Number	LS013B7DH05
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	3 V
Interface Type	3 V Serial
Reflectance	14.5%
Power Consumption*	60 μW
Connector	FPC
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	-20 to +70°C

## 1.33-inch (diagonal) Color Memory LCD

HR-TFT Landscape Transflective Display

Part Number	LS013B7DH06
Pixel Format	128 × RGB × 128, 8 color
Outline Dimensions (mm)	26.82 × 31.3 × 0.845
Active Area (mm)	23.808 × 23.808
Dot Pitch (mm)	0.062 × 0.186
Input Voltage	5 V
Interface Type	3 V Serial
Reflectance	10%
Power Consumption*	60 μW
Connector	FPC
Operating Temp. Range	-20 to +70°C

## 2.7-inch (diagonal) Memory LCD

HR-TFT Landscape Transflective Display

Part Number	LS027B7DH01A
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	17.5%
Power Consumption*	50 μW Static, < 175 μW Dynamic
Connector	FPC
Operating Temp. Range	-20 to +70°C

## 4.4-inch (diagonal) Memory LCD

HR-TFT Landscape Transflective Display

Part Number	LS044Q7DH01
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 Static, < 500 μW Dynamic
Connector	FPC
Operating Temp. Range	-20 to +70°C

**WHITE GOODS | RETAIL TAGS | ANY PRODUCT WITH A BATTERY**

\*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.



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