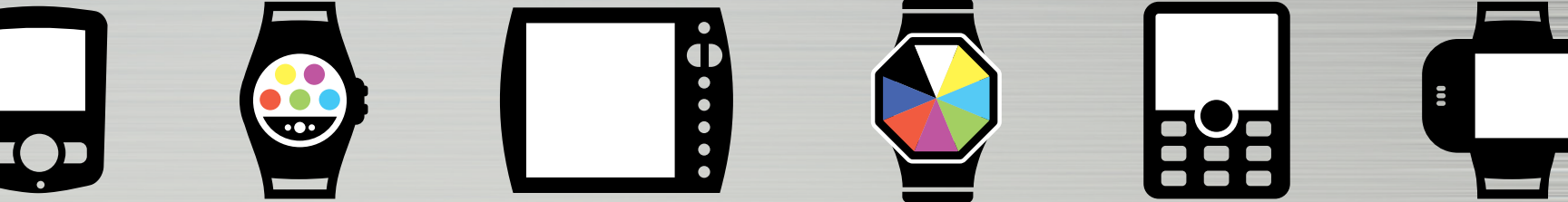


## The Sharp Memory LCD Suite

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

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