

## Overview

Azumo's next generation OB (Optical Bonding) front light maintains all of the benefits of LCD 2.0 technology with the added benefit of cover lens and touch film compatibility. LCD 2.0 can be used seamlessly in any lighting condition: from dark spaces to bright, direct sunlight. Sharp's reflective, MIP LCD technology enables Azumo's patented lightguide technology to deliver high quality images with ultra-low power consumption, extending the battery life of your device. The active matrix MIP LCD integrated with a highly efficient front light offers a superior user experience for a variety of applications where outdated, static HMI no longer suffices.

- ✓ OB - Optical bonding capable (**cover lens & touch film compatible**)
- ✓ **Sufficient brightness** as low as 6 mW
- ✓ SPI interface for **simple connectivity**
- ✓ 0.05mm thick, Azumo film is over **5x thinner** than alternative light guides
- ✓ **Less power** compared to a backlit LCD
- ✓ Superior **readability** in all lighting conditions
- ✓ **Intrinsically safe** with wide temperature range
- ✓ Active matrix MIP LCD enables **dynamic menu-driven, multi page HMI**



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Sharp Display P/N	LS027B7DH01
Resolution	400 (H) x 240 (V)
Active Area	58.8 mm (H) x 35.28 mm (V)
PPI	173
Display Colors	B&W
Outline	62.8 mm (W) x 42.82 mm (H) x 1.64 mm (D)
Display Thickness	1.91 mm
Display Power Consumption (Static Image)	50 μW
Display Power Supply Voltage	5.0V (Analog) & 5.0V (Digital)
Response Time, Rise + Fall	10 + 20 ms
Interface	SPI
Front Light Power Supply Voltage	3.0 V
Front Light Power Consumption	6 - 75 mW
Front Light Brightness, Typ	21 nits at 60mW
Front Light Brightness Uniformity, Typ	54
Contrast Ratio - Native LCD	14
Viewing Angle - Native LCD	55/55° (H) & 60/60° (V)
Storage temperature (C°)	-30°C ~ 80°C
Operating temperature (C°)	-20°C ~ 70°C

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**\*Preliminary data. May be updated as testing continues. Latest update: 10/02/2023**

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