

Product Summary

1.9 cm (0.76 Type) Black-and-White LCD Panel

LCX209

1. Description

The LCX209 is a 1.9 cm diagonal active matrix TFT-LCD panel addressed by polycrystalline silicon super thin film transistors with built-in drivers. Use of three LCX209 panels provides a full-color representation. The square pixel array suitable for data projectors is capable of displaying fine graphics and text. In addition, the built-in 3.3 V interface circuit leads to lower voltage of timing and control signals. (Applications: Liquid crystal data projectors, Liquid crystal multimedia projectors, Liquid crystal rear projection TVs, etc.)

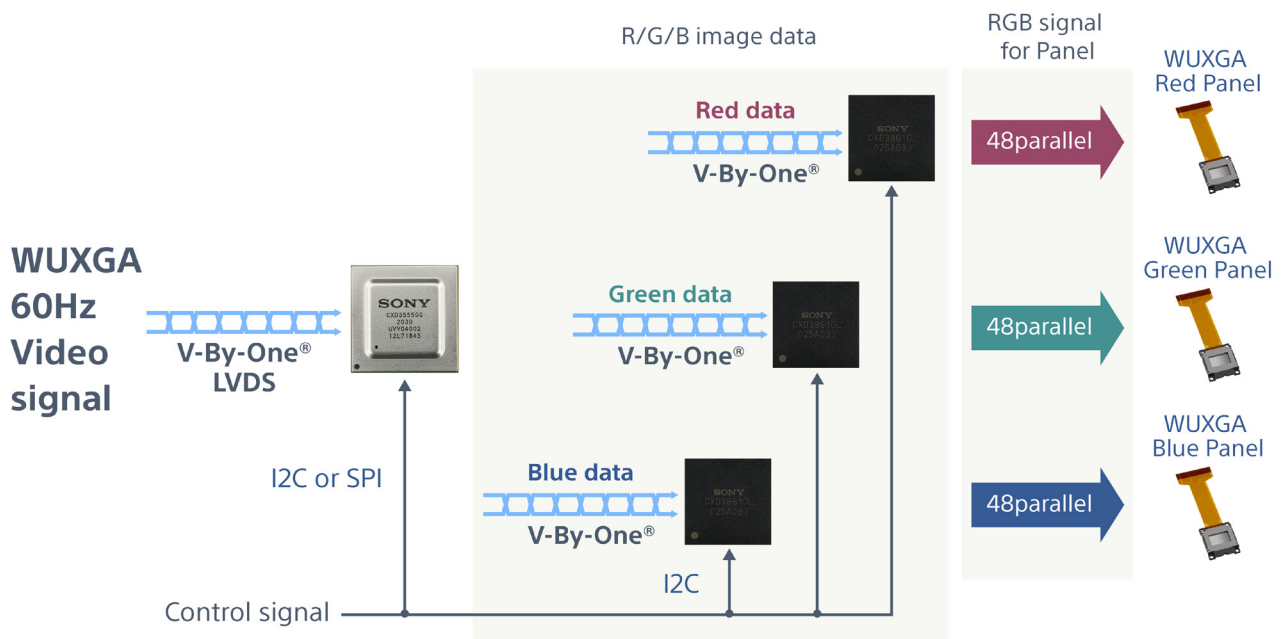
2. Features

- ◆ 1.9 cm in diagonal (0.76 type)
- ◆ WUXGA display (Screen aspect ratio 8:5)
- ◆ Number of active dots: 1924 (H) × 1204 (V) = 2316496
- ◆ High optical transmittance: 32.0 % (typ.)
- ◆ High contrast ratio: 1000:1 (typ.)
- ◆ Ultra-high aperture technology and high light resistant structure
- ◆ On-chip microlens
- ◆ Blue LASER interference suppression
- ◆ Polycrystalline silicon TFT (Thin Film Transistor) high-speed scanner
- ◆ 4x-speed 1F inverted drive system (The video signal is polarity-inverted every 1 field.)
- ◆ Supports 480fps by high-speed scan
- ◆ 1F-VCOM inverted drive
- ◆ Built-in high-quality picture circuit Ghost free circuit
- ◆ Built-in input level conversion circuit
- ◆ Up/down and/or right/left inverse display function
- ◆ High efficiency radiation structure
- ◆ Dust-proof glass package
- ◆ Normally black mode

3. Supply voltage, Temperature range

Item	Rated value	Unit
Operating temperature	-10~+75	°C
Storage temperature	-20~+85	°C
Supply voltage	15.5±0.25 10.0±0.5 -5.0±0.5	V
Input pulse voltage (Vp-p of all input pins except for VSIG1 to 48 and PSIG)	3.0~5.5	V

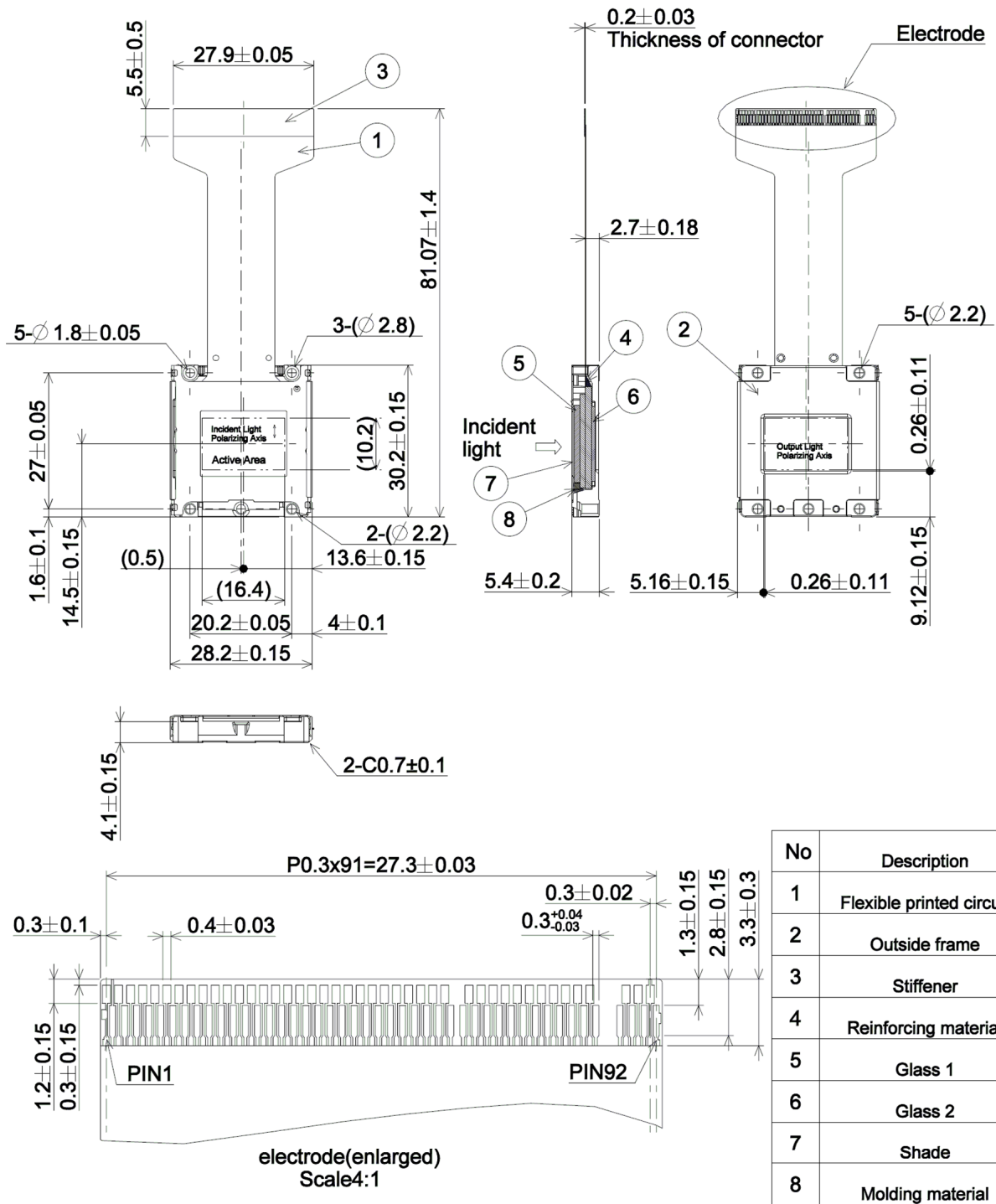
4. System block diagram



*V-by-One® is a registered trademark of Thine Electronics Inc.

5. Package Outline

(Unit: mm)



The rotation angle of active area relative to H and V is $\pm 1^\circ$

External Pin Plating

constituent materials	Thickness	Remarks
Gold plating	$0.02 \mu\text{m}$ or more	Ni underplating 2 to 6 μm

Mass 8.3g