

FEATURES

- 695 x 218 dot active resolution (151,510 dots)
- 705 x 222 dot total resolution (156,510 dots)
- 6.3 μm (H) x 11.3 μm (V) dot pitch
- Ultra-compact (0.20" diagonal)
- Active pixel area (4.38 mm x 2.46 mm)
- Parallel RBG analog input
- Simple 3.3-volt interface for CMOS compatible driver chip
- 60-75 Hz frame rate
- Power-saving sleep mode
- Integrated low-voltage detect
- Integrated horizontal and vertical scanners

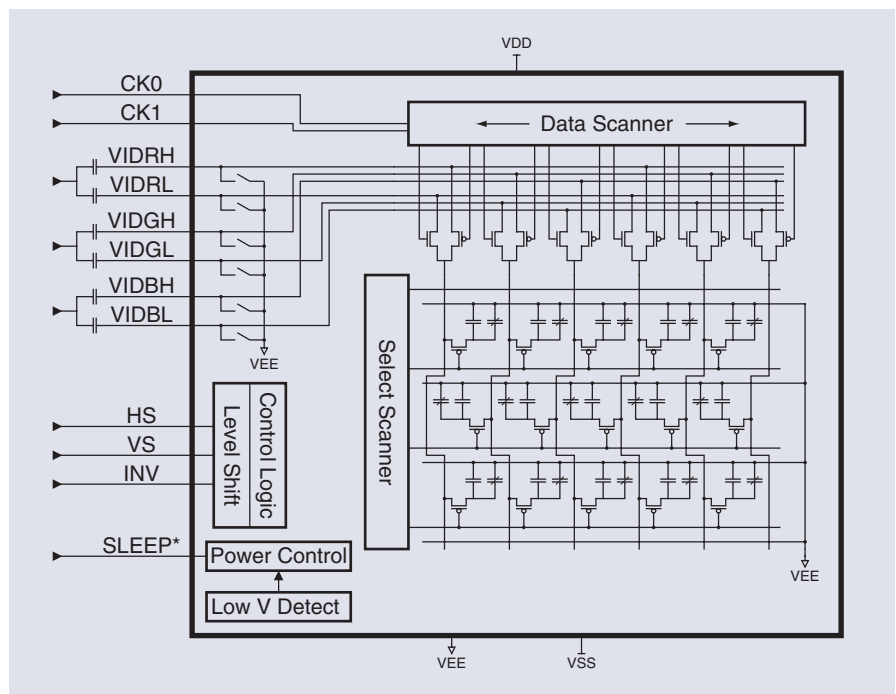
BLOCK DIAGRAM

The CyberDisplay® 152K LV is a color-filter active-matrix liquid crystal display (AMLCD) with 151,510 (695 x 218) color dot resolution. The display utilizes high-performance single-crystal silicon transistors, and is the smallest (0.20" diagonal) transmissive AMLCD for the resolution. The transmissive CyberDisplay 152K LV with color filter has the same display architecture as the industry standard LCD monitor or TV. The ultra-compact CyberDisplay 152K LV is ideal for camcorder and digital camera viewfinders or entry-level portable consumer and industrial applications.

Functional Description

The CyberDisplay 152K LV features Kopin's patent-pending low-voltage architecture for low power consumption and compatibility with CMOS driver ICs. Horizontal and vertical scanner circuits are integrated along with a sleep mode. The active array of 695 x 218 dots is surrounded by opaque dummy pixels, for a total array size of 705 x 222 dots. Alternate rows are shifted horizontally by 1½ dots to produce a delta pixel arrangement.

The CyberDisplay 152K LV can be driven by the A220 or A221 controller IC.



*Specifications subject to change without notice

DISPLAY MARKETING

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HONG KONG

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JAPAN

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KOREA

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The Low Voltage

CyberDisplay® 152K LV

is an active-matrix

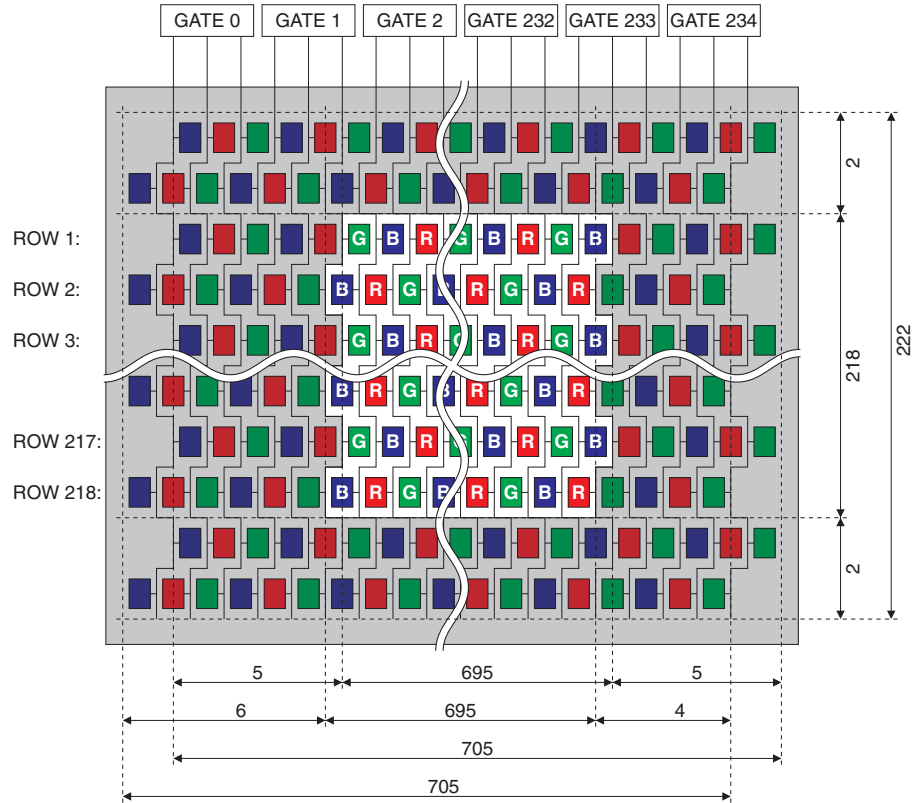
liquid crystal display

with 695 x 218 color dot

resolution, arranged in

a 16 x 9 format.

PIXEL LAYOUT



ELECTRICAL

ITEM	TYPICAL
POWER	
Supply Voltage	VDD = 3.50 volt, VSS = -5.00 volt
Operating Current	IDD = .40 mA, ISS = .40 mA
OPERATING ENVIRONMENT	
Temperature	-20°C to 60°C
DIMENSIONS	
Height*	4.40 mm
Width*	7.60 mm
Depth*	1.40 mm
Weight	.16 grams
Flex Cable length	51 mm

*Display die dimensions

INTERFACE

PIN	SYMBOL	DESCRIPTION
1	VEE	Supply = 0V
2	VIDRH	High red video input
3	VIDGH	High green video input
4	VIDBH	High blue video input
5	VIDRL	Low red video input
6	VIDGL	Low green video input
7	VIDBL	Low blue video input
8	HS	Horizontal sync
9	VS	Vertical sync
10	INV	Inversion polarity
11	SLEEP*	Sleep mode
12	CK0	Clock
13	CK1	Clock
14	VDD	Supply
15	VSS	Supply

*Signal is active low