

FEATURES

- 854 x 480 x 3 dot active resolution (1,229,760 dots)
- 858 x 484 x 3 dot total resolution (1,245,816 dots)
- 5 μm (H) x 15 μm (V) dot pitch
- Ultra-compact (0.58" diagonal)
- Active pixel area (12.81 mm x 7.2 mm)
- Parallel RGB 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
- Bidirectional vertical and horizontal scanning

BLOCK DIAGRAM

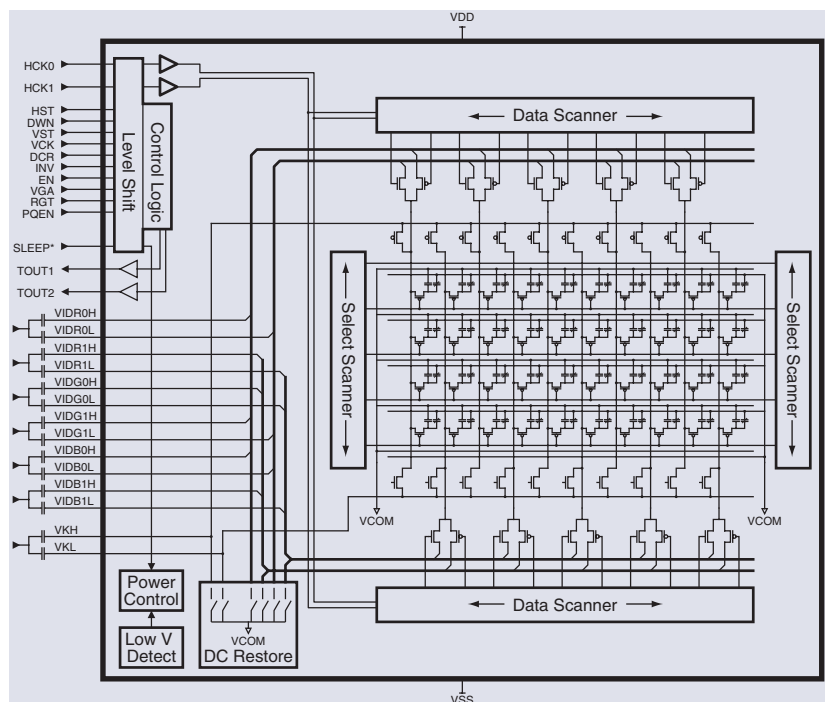


The CyberDisplay® WVGA LV is a color-filter active-matrix liquid crystal display (AMLCD) with 1,229,760 (854 x 480 x 3) color dot resolution. The display utilizes high-performance single-crystal silicon transistors, and is the smallest (0.59" diagonal) transmissive AMLCD for the resolution. The transmissive CyberDisplay WVGA LV with color filter has the same display architecture as the industry standard LCD monitor or TV. The ultra-compact CyberDisplay WVGA LV is ideal for high end consumer or professional portable devices and industrial applications.

Functional Description

The CyberDisplay WVGA LV is a wide VGA display arranged in a 16 x 9 format and features Kopin's patent-pending low-voltage architecture for low power consumption and compatibility with CMOS driver ICs. Bidirectional horizontal and vertical scanner circuits are integrated, along with a sleep mode. The active array of 2562 x 480 dots is surrounded by opaque dummy pixels, for a total array size of 2574 x 484 dots. Each full color square pixel is composed of three primary color dots.

The CyberDisplay WVGA can be driven by the A910 controller IC.



*Specifications subject to change without notice

DS KCD-KWCF-AA Rev. A 8/3/06

DISPLAY MARKETING

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HONG KONG

Tel: 852-2607-4151 Fax: 852-2607-4156

JAPAN

Tel: 81-3-5325-3549 Fax: 81-3-5322-2929

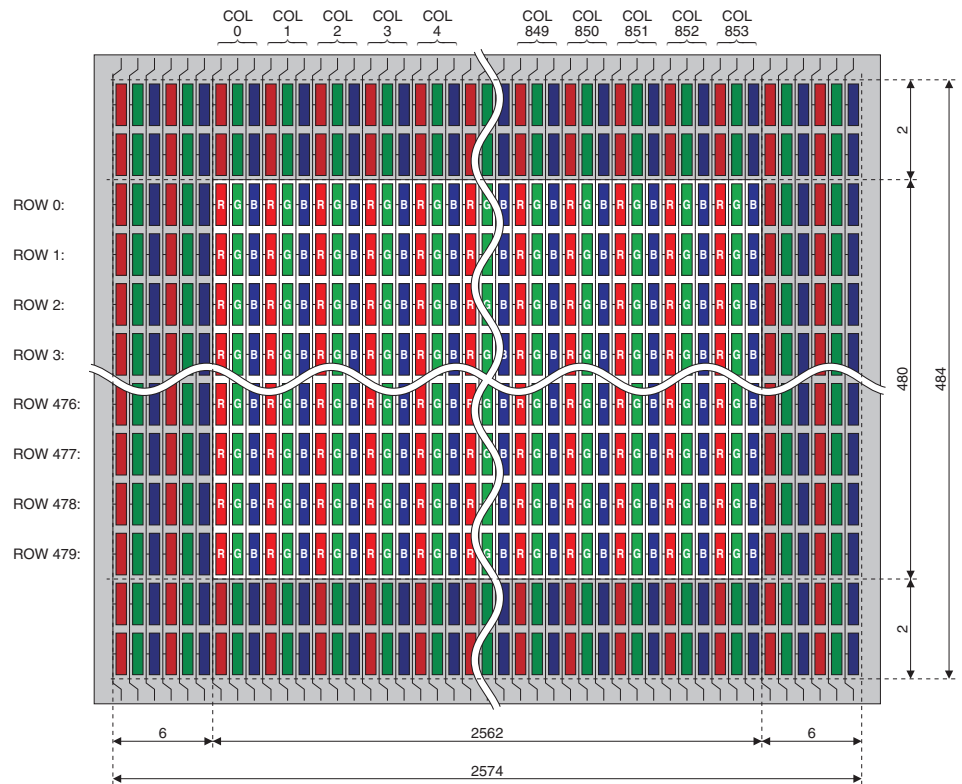
KOREA

Tel: 82-31-337-2451 Fax: 82-31-335-7680

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The CyberDisplay® WVGA LV is an active matrix liquid crystal display with 854 x 480 x 3 color dot resolution, arranged in a 16 x 9 format.

PIXEL LAYOUT



INTERFACE

PIN	SYMBOL	DESCRIPTION
1	VCOM	Pixel common electrode
2	VEE	Supply = 0V
3	VIDG0H	High video input
4	VIDR1H	High video input
5	VIDB1H	High video input
6	VIDG1H	High video input
7	VIDB0H	High video input
8	VIDR0H	High video input
9	VKH	High black input
10	HCK0	Horizontal clock
11	HCK1	Horizontal clock
12	HST	Horizontal start
13	DWN	Vertical scan direction
14	VST	Vertical start
15	VCK	Vertical clock
16	DCR	DC restore enable
17	INV	Inversion polarity control
18	EN	Row enable

PIN	SYMBOL	DESCRIPTION
19	VGA	VGA mode control
20	RGT	Horizontal scan direction
21	PQEN	Precharge enable
22	RSVI	Reserved input (tie to 0V)
23	SLEEP*	Sleep mode
24	VDD	Supply
25	VSS	Supply
26	VKL	Low black input
27	VIDR0L	Low video input
28	VIDB0L	Low video input
29	VIDG1L	Low video input
30	VIDB1L	Low video input
31	VIDR1L	Low video input
32	VIDG0L	Low video input
33	VCC	Interface Supply
34	TOUT1	Test output
35	TOUT2	Test output
36	VCOM	Pixel common electrode

*Signal is active low