

## FEATURES

- 300 x 225 active resolution
- 320 x 240 total resolution
- 11 µm (H) x 11 µm (V) pixel pitch
- Ultra-compact (0.16" diagonal)
- Active pixel area (3.30 mm x 2.475 mm)
- Analog input video
- Simple 3.3-volt interface for CMOS compatible driver chip
- Power-saving sleep mode
- Integrated low-voltage detect
- Integrated horizontal and vertical scanners
- Bidirectional horizontal scanning



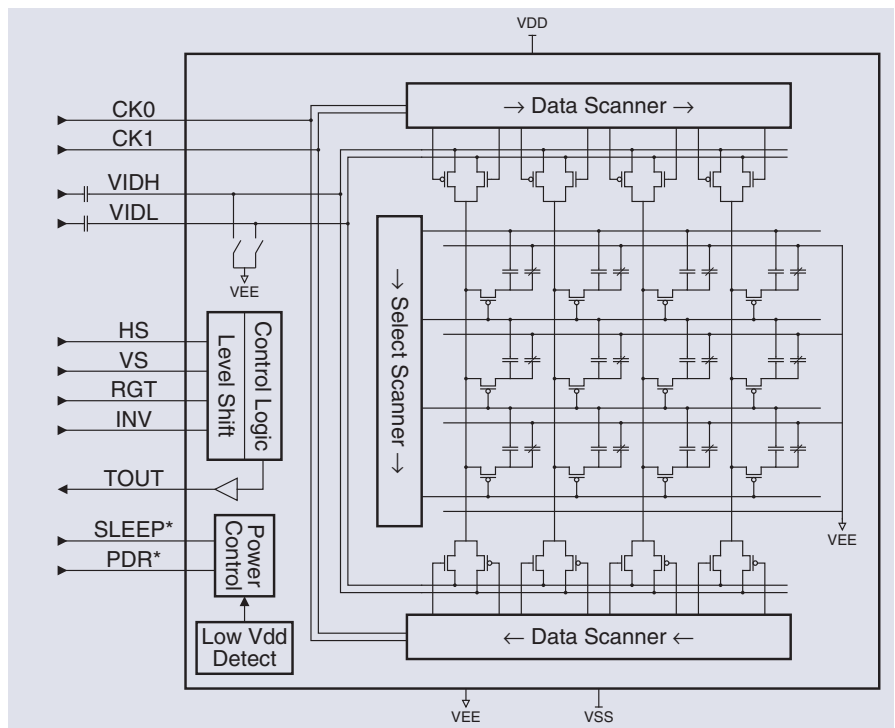
The CyberDisplay® 300M LV is a monochrome active-matrix liquid crystal display (AMLCD) with (300 x 225) spatial resolution. The display utilizes high-performance single-crystal silicon transistors, and is the smallest (0.16" diagonal) transmissive AMLCD for the resolution. The transmissive CyberDisplay 300M LV has the same display architecture as the industry standard LCD monitor or TV. The ultra-compact CyberDisplay 300M LV is ideal for camcorder and digital camera viewfinders, or entry-level portable consumer and industrial applications.

### Functional Description

The CyberDisplay 300M LV features Kopin's patent-pending low-voltage architecture for low power consumption and compatibility with CMOS driver ICs. Bidirectional horizontal and fixed top to bottom vertical scanner circuits are integrated. A sleep mode is provided to simplify system power management. The active array of 300 x 225 pixels is surrounded by opaque dummy pixels, for a total array size of 320 x 240 pixels.

The CyberDisplay 300M LV can be driven by the A300 controller IC.

BLOCK DIAGRAM



\*Specifications subject to change without notice

#### DISPLAY MARKETING

Tel: 508-870-5959 Fax: 508-870-0660

#### 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

cyberdisplay@kopin.com

With a spatial resolution of 300 x 225, the CyberDisplay® 300M LV is ideal for camcorder and digital camera viewfinders or portable consumer and industrial applications.

SPECIFICATIONS

## ELECTRICAL

	TYPICAL
<b>POWER</b>	
Supply VDD	3.3V
Supply VSS	-5.0V
Operating Current	0.4 mA
<b>OPERATING ENVIRONMENT</b>	
Temperature	-20° to 60°C
<b>DIMENSIONS</b>	
Height*	4.4 mm
Width*	7.4 mm
Depth*	1.4 mm
Weight	0.16 grams
Flex Cable Length	51.11 mm

\*Display die dimensions

## INTERFACE

PIN	SYMBOL	DESCRIPTION
1	VEE	Supply = 0V
2	VEE	Supply = 0V
3	VIDH	High Video Input
4	VDD	Supply = +3.3V
5	CK0	Clock
6	CK1	Clock
7	VSS	Supply = -5V
8	PDR*	Power Down Reset
9	SLEEP*	Sleep Mode
10	HS	Horizontal Sync
11	VS	Vertical Sync
12	RGT	Horizontal Scan Direction (H = left-to-right)
13	INV	Inversion Control
14	VIDL	Low Video Input
15	TOUT	Test Output = XOR (TV, TH, RGT, INV)

\*Signal is active low