

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

BLOCK DIAGRAM

DISPLAY MARKETING

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HONG KONG

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CyberDisplay® 300M LV

Part Number: KCD-QD05-AA Frameless

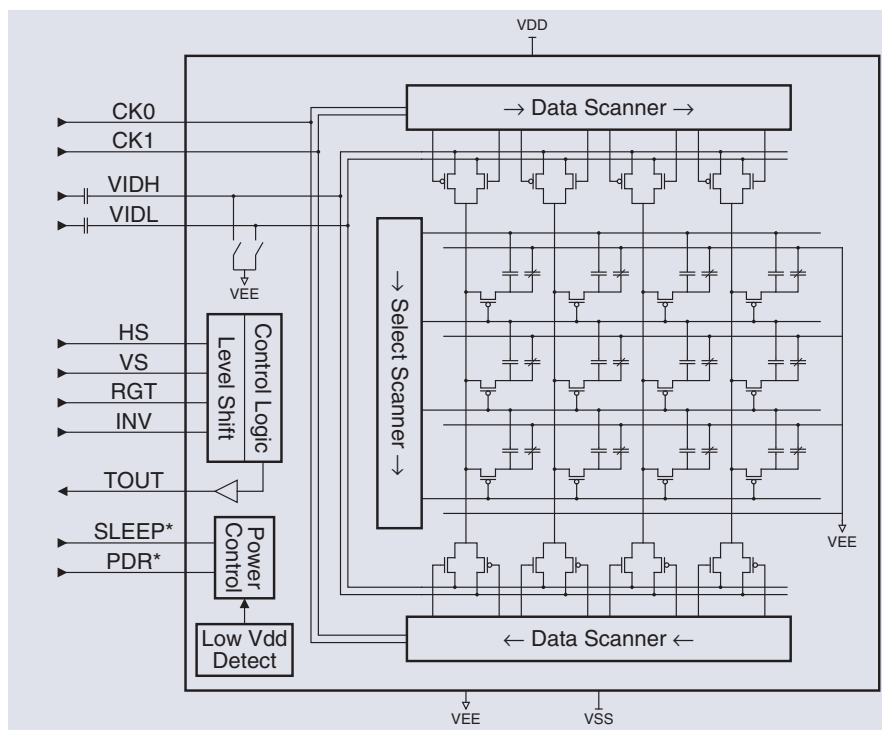


The CyberDisplay® 300M LV is a monochrome active-matrix liquid crystal display (AMLCD) with (300 x 225) spatial resolution. The display utilizes high-performance single-crystal silicon transistors, and is the smallest (0.16" diagonal) transmissive AMLCD for the resolution. The transmissive CyberDisplay 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.



*Specifications subject to change without notice



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

CyberDisplay® 300M LV

Part Number: KCD-QD05-AA Frameless

ELECTRICAL

| | TYPICAL |
|--|--------------|
| P O W E R | |
| Supply VDD | 3.3 V |
| Supply VSS | -5.0 V |
| Operating Current | 0.4 mA |
| O P E R A T I N G E N V I R O N M E N T | |
| Temperature | -20° to 60°C |
| D I M E N S I O N S | |
| 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 = +3.3 V |
| 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