OASYS Technology, LLC
Optical Assemblies & SYStems

PINPOINT
SOLUTIONS, INC.

Introduction

The HMD2 DVI display driver delivers crisp SXGA video at up to 60 Hz video frame rates with exceptional image quality in a small form-factor, low cost solution.

Precise analog control, on-board FPGA line processing and USB configurability make the HMD2 ideal for almost any HMD application.

color 1280x1024 • mono 1280x1024*

The HMD2 is customized to drive Kopin 1280x1024 monochrome TN, MVA and color 'filter' displays.

A reconfigurable FPGA is a key component allowing the board to be easily modified for various custom functions from Gamma correction, to monochrome processing, to non-standard frame rates.

The OASYS optical design allows for 30 x 40 degree FOV with "see-through" capability.

PSI is pleased to demonstrate this board in conjunction with OASYS Technology, our leading partner in HMD systems designs.

Specifications

- Video Input
  DVI

- Supported* Kopin CyberDisplays®
  1280x1024 mono (TN or MVA)
  1280x1024 'quad' color (TN)*
  60Hz sync

- Programmable PWM backlight (color or mono)

- Power Supply
  +12V DC

- Power Use
  2.5W (multipurpose eval unit)
  1.0W (production unit target)

- Dimensions
  105mm (L) x 65mm (W) x 30mm (H) - eval Enclosure
  60mm (L) x 37mm (W) - PCB
  1" diagonal - LCD

- Other Features
  Configurable via USB 2.0 not required for operation

*~640x512 effective resolution - contact PSI for other display manufactures

About OASYS Technology

Contact OASYS Technology for complete HMD systems design.

John Hall
jhall@oasys-technology.com
603. 232.8221

Evaluation Kit

PC — DVI receiver — Pinpoint FPGA — Video DACs — AMLCD *SXGA*

color / mono

USB — DC — +12V DC Supply

PCB

At PSI we are always open to new business opportunities. Please contact us if you would like to discuss how we can customize HMD2 to fit your unique product.

Peter Parsons
pparsons@asic-design.com
888.543.0050 x 103

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