Applications

- Compact Front Projectors
- High Definition Rear Projection TV

OVP2200+OVP921

Product Features

OVP2200

- standard 100% digital CMOS technology
- no spacers in active area
- digital interface
- high aperture ratio
- insensitive to photo-induced carrier generation
- designed for color field sequential operation
- horizontal alignment of 16 pixels
- vertical alignment of 16 lines

OVP921 (driver)

- OVP921 will drive OmniVision's color field sequential LCOS panels with resolutions up to 1280 x 720
- includes three video inputs:
  - single pixel 24-bit RGB
  - 2 channel MIPI DSI receiver 24-bit packed RGB888
  - USB input as a slave device
- includes dual internal PLL clock generation
- outputs enable/disable control signals to external solid state light sources
- supports horizontal and vertical flipping and programmable sync polarities
- supports several video scaling functions
- converts incoming video to fixed resolution of LCOS panel
- ±15 degree vertical keystone correction
- includes on chip 8051 microcontroller with 32 KB program space and 256 bytes RAM

Ordering Information

- OVP2200-MAAA-TA (lead-free) 35-pin PCB
- OVP2200-MADA-TB-Z (lead-free) 30-pin FPCA without compensator
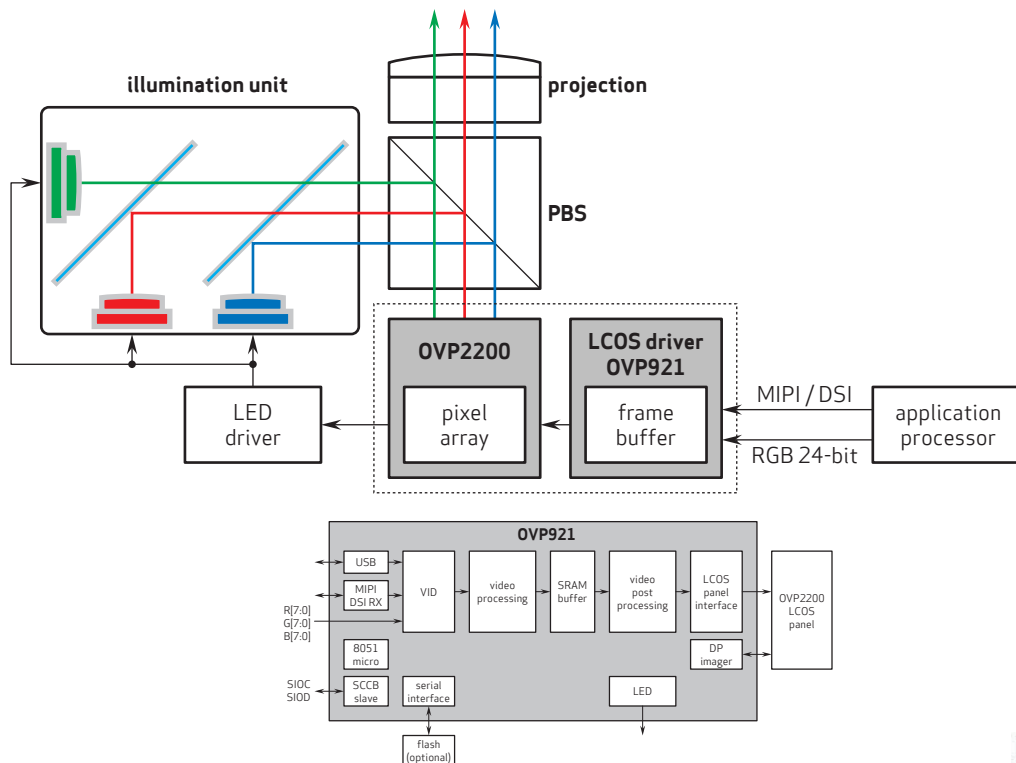- OVP0921-B44G (lead-free) 144-pin BGA package

Product Specifications

OVP2200

- power supply:
  - core: 1.5V ±5 typical
  - I/O: 1.5V ±5% typical
  - pixel array: 5.5V ±5% typical
- power requirements:
  - active: 200 mW
  - standby: 1.5 mW
- temperature range:
  - operating: +10°C to +70°C

- active area: 5.832 mm x 3.240 mm
- native resolution: 1280 x 720
- native device diagonal: 0.26 in.
- pixel pitch: 4.5 µm
- package dimensions: 17.5 x 6.6 x 3.2 mm

OVP921

- power supply:
  - core: 1.2V
  - I/O: 1.8V / 3.3V
- temperature range: 0°C to +70°C

- power requirements:
  - 1.2V: 210 mW (at max resolution)
  - 3.3V: 120 mW
- package dimensions: 9 mm x 9 mm

Functional Block Diagram