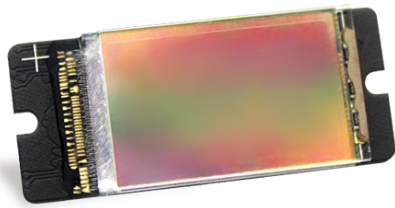
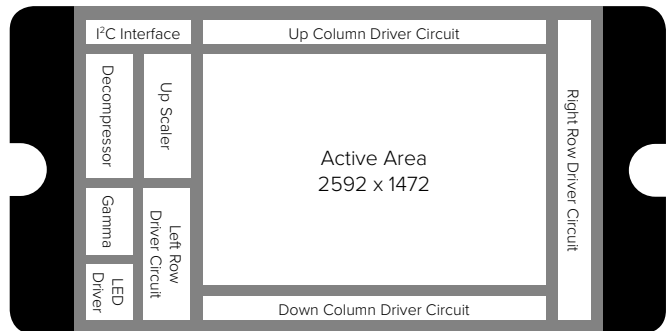


NED DISPLAY



FUNCTIONAL BLOCK DIAGRAM



FEATURES

- Single panel Liquid Crystal on Silicon (LCoS) with RDC200-Display Controller
- 07" active display diagonal
- High definition (2560x1440) array of 6.05 μm mirrors
- High frame refresh rate (up to 360 Hz) for Field Sequential Color
- Gamma corrected 8-bit gray depth
- Low power consumption
- Embedded LED driver
- Embedded Temperature Sensor
- High speed LVDS interface: 8 channels x 1000 Mbps
- High reflectivity: over 82% (NFY)
- Contrast ratio: 500:1 (at FSC driving, NFY)
- Active area: 15.488 x 8.712 mm (QHD)
- Module size: 28.3 x 12 mm (NFY)
- Power consumption: 200 mW (NFY)
- Fast VA (Vertical Alignment) LC mode
- High voltage LCoS process
- RoHS compatible package

GENERAL DESCRIPTION

The RQ is a highly integrated LCoS display module for a single panel optical display system such as HMD (Head-Mounted Display), HUD (Head-Up Display), and Pico Projectors. It operates up to 360 Hz refresh rate. It includes RGB LED driver, low-voltage differential signal receiver and power-down detection circuit. The fast-speed differential signal receiver, which receives LVDS format, interfaces with fast-speed parallel digital signals (8 channels x 1000 Mbps) and controls signals for high frame rate of a panel. The LVDS interface enables RDP700Q to perform a long path connection and high frame rate display, allowing the panel to be applied to a single panel system such as HMD, HUD, and Pico Projectors. Gamma corrected resistor string and gamma tab voltages are fully programmable for enhanced gray scaling performance. The RGB LED driver supports RGB LEDs as a light source of applications.

APPLICATIONS

- Head-Mounted Display
- Head-Up Display
- Pico Projector
- AV Projector
- VR

PRODUCT HIGHLIGHTS

1. Single-panel liquid crystal on silicon (LCoS) with RD00 display controller
2. High frame rate for field sequential color of single panel optical system
3. Differential signal interface for long path
4. Embedded LED driver
5. Embedded temperature sensor
6. Low power consumption