



# HX8805

TFT-LCD Timing Controller with  
Dual LVDS input and Dual RSDS output  
Aug 2003, Version 01

PRELIMINARY

## 1. General Description

The HX8805 is a timing controller embedded Dual port LVDS receiver and Dual port RSDS (Reduced Swing Differential Signaling) transmitter for TFT-LCD panel. The LVDS and RSDS are low EMI and low voltage swing interfaces that transmit data among scaler, timing controller, and source drivers. This chip supports display resolution from SXGA to UXGA .

## 2. Features

- Input frequency range from 20MHz to 85MHz.
- Supports SXGA (1280\*1024), SXGA+(1400X1050) and UXGA(1600\*1200) TFT-LCD panels.
- Building in Dual port LVDS receiver.
- Supporting LVDS input Even/Odd swap.
- Dual port RSDS interface for low power consumption and low EMI.
- Supporting both 6/8 bits input and 6/8 bit output.
- Supporting both Sync(Hs/Vs) mode and DE mode.
- Embedded aging generator for simplifying TFT-LCD panel dynamic burn in issues.
- Supporting RSDS output data P/N swap, clock P/N swap, MSB/LSB swap, F/B swap.
- Building in spread spectrum controller for dramatically reducing EMI.
- Supporting POL 1/2 line inversion mode.
- Operating voltage at +3.3V.
- Supporting Fail-safe mode operation.
- Supporting serial interface.
- Flexible control output with user-programmable timings.
- 128 TQFP package with size 14mm X 14mmX10mm(Height).
- Application for NB/Smart LCD monitor application.