



HX8803A

TFT-LCD Timing Controller with
LVDS input and RSDS output
Sep 2002, Version 01

PRELIMINARY

1. General Description

The HX8803A is a timing controller embedded single port LVDS receiver and RSDS (Reduced Swing Differential Signaling) transmitter for TFT-LCD panel. The LVDS and RSDS are a low EMI and low voltage swing interfaces that transmit data among scaler, timing controller, and source drivers. This chip supports display resolution from SVGA to WXGA.

2. Features

- Input frequency range from 40MHz to 85MHz.
- Supports SVGA(800X600), XGA(1024X768), and WXGA(1280X800) TFT-LCD panels.
- Building in single port LVDS receiver.
- RSDS interface for low power consumption and low EMI.
- Supporting both 6/8 bits input. 8 bit input and 6 bits output in FRC mode.
- Embedded aging generator for simplifying TFT-LCD panel dynamic burn in issues.
- Supporting both Sync(Hs/Vs) mode and DE mode.
- Supporting POL 1/2 line inversion mode.
- Supporting data inversion function for minimizing RSDS data transition.
- Building in spread spectrum for reducing influence of EMI.
- Operating voltage at +3.3V.
- 64 TQFP package with size 10mm X 10mmX10mm(Height).
- Applying to NB/Smart LCD monitor application.