EPD9083 Product Brief

EDP9083 is 6-bit (64 Gray-Scales) source driver for TFT LCD panels with 1026/966/960/726/720 channels. It provides direct drive, 1026/966/960/726/720 outputs, and full dynamic range to drive 262,144 color TFT displays. Using LBR, users can get a benefit of easy LCD wiring. EPD9083 has a maximum clock frequency of 440MHz, and uses a logic voltage of 2.3V~3.6V. An adoption of Mini Low Voltage Differential Signaling (Mini-LVDS) interface could realize very low EMI and the reduction of the number of input ports.

Features

- Source driver for active matrix LCD
- 1026/966/960/726/720 LCD driving output channels
- VGMA1 ~ VGMA14 for adjusting Gamma correction with 6-bit resolution / 64 gray scale
- Output dynamic range: 0.2V ~ (VDDA-0.2V)
- Mini-LVDS input interface: Mini Low Voltage Differential Signaling.
  - Mini-LVDS input interface for low EMI
  - Maximum Bandwidth: 360MHz (VID=150mV, 2.3V~3.6V) /440MHz (VID=150mV, 2.3V~3.6V, 3pair Mode Only)
- Function
  - Column, H-1Dot (and H-2Dot), and N-line inversion display function provided
  - Cascade function with bi-direction shift control
  - Offset canceling function
  - Adoption of LBR port for easy LCD wiring
  - Half VDDA function
  - Abnormal display prevention mode during power on sequence with embedded POR circuit
  - In rush current protection scheme during reverse power on/off sequence
- Power supply voltage
  - Power for logic circuit (VDDD): 2.3V~3.6V
  - Power of LCD driving voltage (VDDA): 9.0V~15V
  - Half Power for VDDA (VDDAH): VGMA8+0.1V (Min), 0.5*VDDA (Typ.), VGMA7-0.1V (Max.)
- Power consumption
  - Power consumption of digital circuit: 10mA
  - Power consumption of analog circuit: 20mA
- COF packaging

EPD9083 Product Brief

ESWIN

DISCLAIMER

ESWIN Computing reserves the right to update the document at any time or improve the product described in this document without notice. The information contained in this document is furnished for informational purposes only. ESWIN Computing makes no warranty of any kind in connection with this document. ESWIN Computing is not liable for any losses caused, including the loss of profits and loss of use.