

FPD48084

LCD TV TFT-LCD Timing Controller with PPDS™ Interface

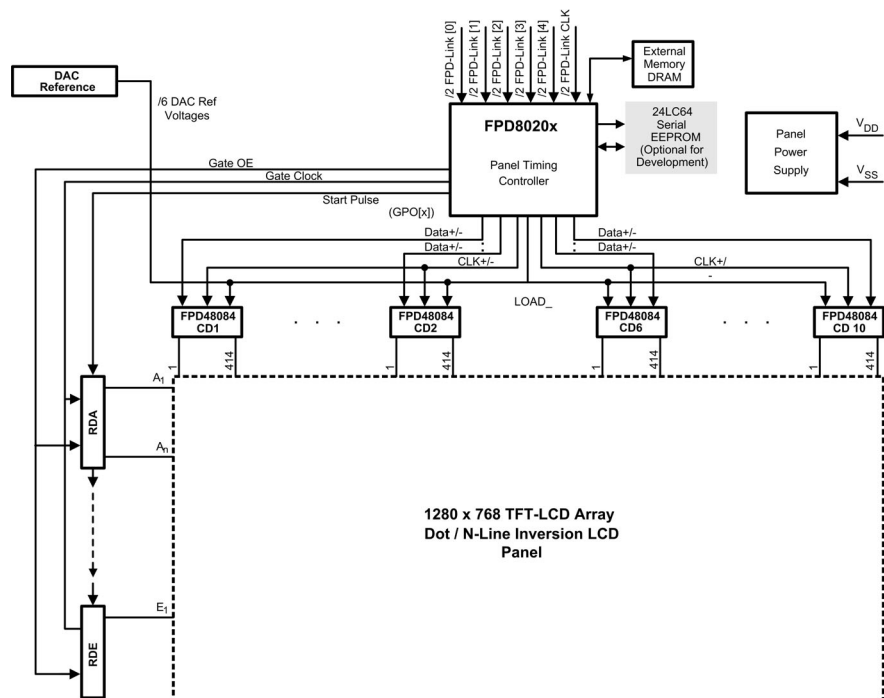
General Description

The FPD48084 Column Driver is a direct drive, 256 gray level, 384 output, TFT-LCD column driver. This device is ideally suited for LCD TV applications, supporting WXGA resolution. It provides the capability to display 16,772,26 colors (24-bit color) with a large dynamic output range for wide viewing angle technologies. This scheme supports digital independent gamma from the TCON, and minimizes required trace routing and PCB size.

The FPD48084 uses National's PPDS™ interface (Point to Point Differential Signaling) to reduce wire count, increase driving distance, enable advanced features, and lower overall system cost. Coupled with an FPD8020x timing controller, the FPD48084 is capable of providing independent color for each of the three subpixel colors (red, green, and blue), enabling the color temperature and balance control that is needed to provide cinema quality video performance for advanced LCD TV applications.

Features

- Provides 384 column driver outputs
- Supports WXGA (1280 x 768) applications for LCD TV
- Point-to-Point Differential data and clock interface
- Supports digital independent gamma from TCON
- 256 Gray levels per color (24-bit color)
- High voltage dynamic range 9.6V to 14.1V Analog supply voltage : VDDA = 10.0V to 14.5V
- Digital supply voltage : VDDD = 2.25V to 2.75V
- 125MHz maximum differential interface operating frequency
- LCD TV interface protocol controls column driver configuration
- Available in TCP or COF
- Internal pattern generation for panel self-test
- Supports both Dot and N-Line inversion



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Notes

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