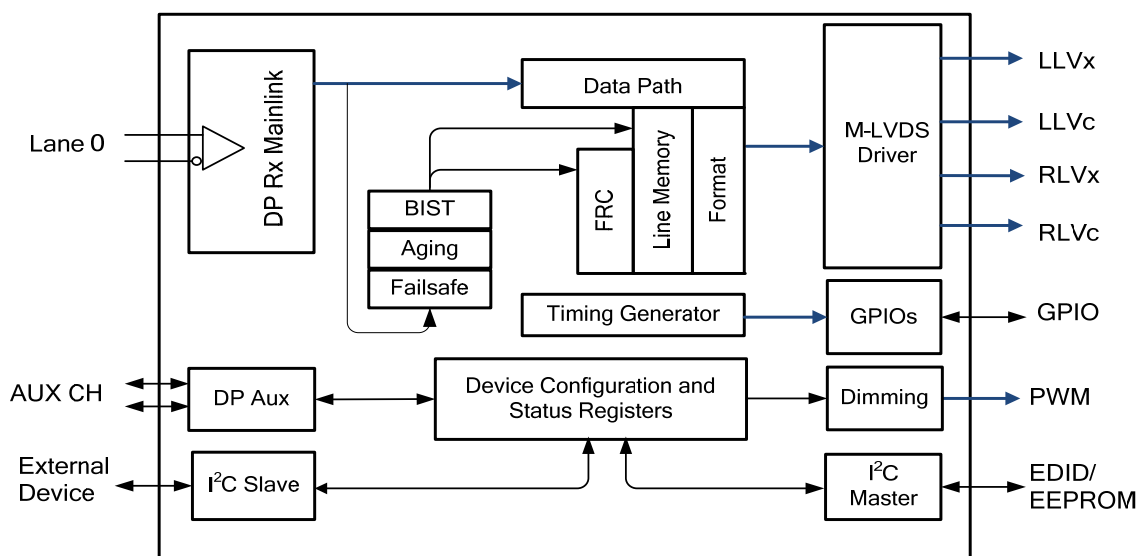


Features and Benefits

- VESA DisplayPort™ 1.1a Specification Compliant
- Support HDCP 1.3 with embedded keys(UI)
- Offer low cost system design solution without external crystal clock
- Support typical 0.5% down spread spectrum clock (SSC) pass-through mode
- 1 physical lane at 1.62Gbps and 2.7Gbps
- Support EDP power sequencing
- TCON (Timing Controller) functions
 - Full color FRC
 - Programmable Gamma correction
 - BIST and Aging pattern support
 - PWM dimming output support
- Mini-LVDS drive functions
 - Support for 6/8-bit panel driver interface
 - Support for up to 8-bit WUXGA resolution
 - Flexible mini-LVDS data mapping for bottom or top mounting
- RSDS drive
 - Support for 6-bit panel driver interface
 - Support for up to 6-bit WUXGA resolution
 - Flexible RSDS data mapping for bottom or top mounting
- Spread Spectrum Clock (SSC) supported
 - Support Spread Spectrum Control (SSC) at the RSDS/mini-LVDS outputs, centre Spread is 0%, +/- 0.125%, +/- 0.25%, +/- 0.50%, +/- 0.75%, +/- 1.0%, +/- 1.5%, +/-2.0% of normal frequency at 2kHz.
- 0.13 μm process
- Display ID/EDID support
- ESD 6kV HBM
- Packages
 - 64-pin LQFP package for 1 lane DP and 1 RSDS output TCON



Block Diagram of ANX9850

Overview

The ANX9850 is a digital video receiver that supports the VESA DisplayPort Specification 1.1a. DisplayPort is a next-generation display interconnect for monitors, notebooks, and consumer electronics.

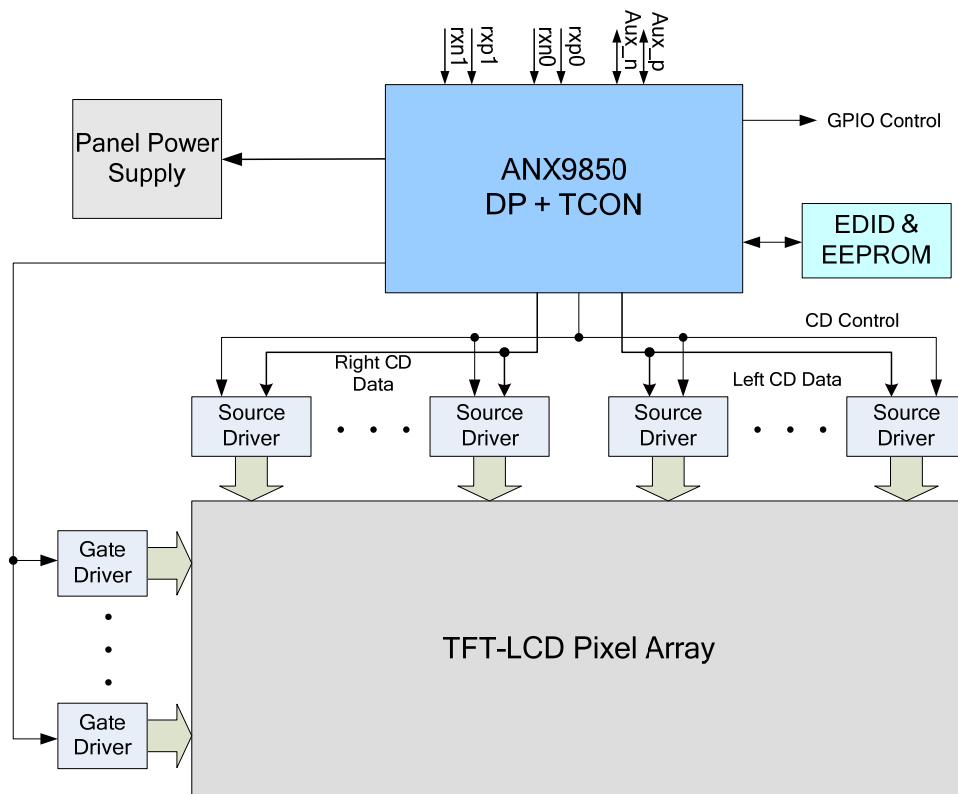
DisplayPort is a high-speed data interconnect that transports uncompressed digital video source to a video display, either as an external connection between separate system components, or within integrated display systems. As a compliant DisplayPort receiver ANX9850 can support a data throughput of 5.4Gbps using a single interconnect cable. Data is transported at a rate of 1.62Gbps or 2.7Gbps on 1 differential pairs.

The AUX CH is a half duplex, bi-directional differential pair that provides 1Mbps data rate for link configuration and management. It is also used to read display EDID (Extended Display Identification Data), and can also be used to carry data from the receiver (sink) device to the transmitter (source) device, such as compressed video data in a teleconferencing application.

In the data path, the ANX9850 supports programmable FRC, and gamma correction, panel BIST defined by VESA.

The resolution ANX9850 supports are VGA, XGA, XGA+, WXGA, SXGA, WSXGA, UXGA and WUXGA. Due to the limited driver pin counts, RSDS driver setting supports 6-bit interface, also the 6-bit RSDS resolution is up to WUXGA panel.

1. 6-bit RSDS interfacing up to WUXGA panel
2. 6/8-bit mini-LVDS interfacing up to WUXGA panel



Application Diagram of ANX9850

Analogix Related Products

| Product Part Number | Description |
|---------------------|--|
| ANX9850_EV | ANX9850 DisplayPort 1.1 Receiver with Direct Drive Monitor and MCU |
| ANX9805 | ANX9805 DisplayPort 1.1 Transmitter |
| ANX9855 | ANX9855 DisplayPort 1.1 Receiver |

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