

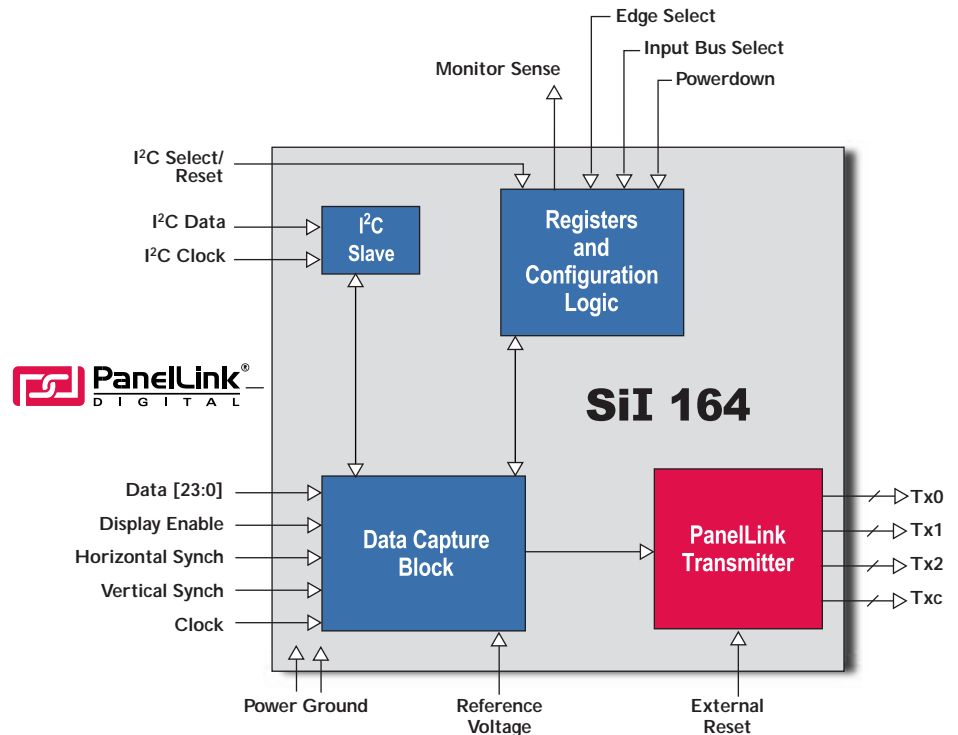
SiI 164 Features

Panellink® Transmitter

- Scalable bandwidth from 25 to 165 MHz (VGA to UXGA)
- Three TMDS® data channels capable of transferring up to 1.65 Gbps per channel
- Inter-pair skew tolerance up to 1 input clock cycle (6 ns at 165 MHz)
- Adjustable TMDS low-voltage swing amplitude for long-distance support
- DC-balanced signals for direct coupling to fiber-optic ready modules
- Operates with all Panellink DVI 1.0 Receivers
- Pin-compatible with SiI 168

Input

- Flexible graphics controller interface
- 12-bit or 24-bit (1 pixel/clock) inputs for true color (16.7 million) support
- Programmable low-voltage interface (1.0V - 1.8V) as well as 3.3V CMOS interface voltages
- De-skewing option to vary clock to data timing
- Supports dual-edge single clock or single-edge dual clock in 12-bit mode
- Supports either single or dual edge clocking in 24-bit mode
- Parallel data can be latched on either the positive or negative edge of clock
- Programmable through I²C interface or configurable by pin settings



Power Management

- 3.3V core provides low-power operation
- Standby mode consumes only 1mW

Part Number - SiI164CT64

The SiI 164 is a DVI-compliant transmitter supporting the full DVI bandwidth of 25 to 165 MHz. As a result, the SiI 164 supports LCD monitors and projectors with resolutions that range from VGA to UXGA (1600 x 1200). Three TMDS® data channels for RGB send data at up to 1.65 Gbps per channel. The SiI 164 incorporates a highly-flexible 12-bit (1/2 pixel per clock edge) or 24-bit (1 pixel/clock input) interface for true color (16.7 million) support. Built in flexibility enables customers to use pins for configuration settings or an I²C interface to program registers.

For customers considering future DVI designs with High-bandwidth Digital Content Protection (HDCP), the SiI 164 is pin-compatible with Silicon Image's SiI 168 DVI-compliant transmitter with HDCP. The SiI 164 is available in a low-cost, simple to use 64-pin TQFP. With design-ins by all of the top-ten PC OEMs, the SiI 164 has become the industry-leading DVI transmitter.

Applications

- PCs
- Graphic Boards

