THCV216

V-by-One® HS High-speed video data receiver

General Description

THCV216 is designed to support video data transmission between the host and display.

This chip can receive 39bit video data and 3bit control data via only a single differential cable at an LVDS clock frequency from 20MHz to 100MHz.

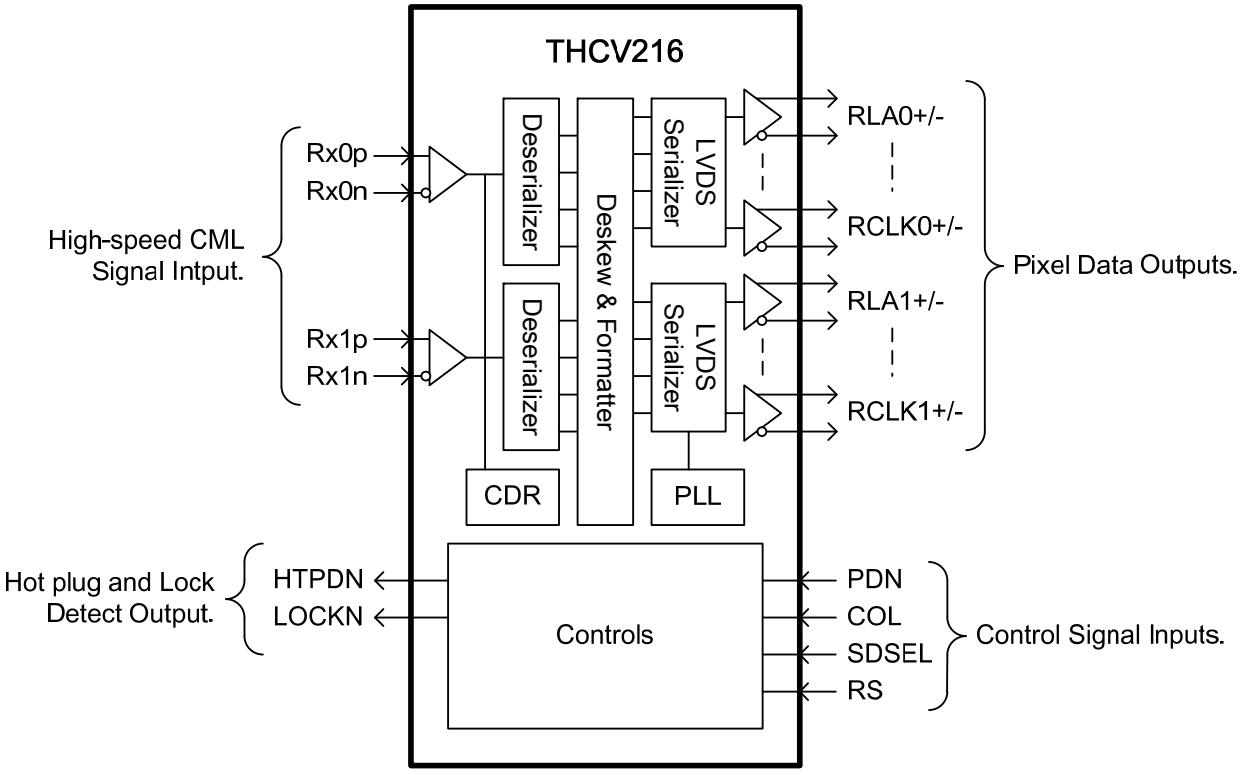
This chip, which has two high-speed data lanes, can transmit the video data up to 1080p/10b/60Hz, 1080p/12b/60Hz. The maximum serial data rate is 3.75Gbps/lane.

Color Depth	Link	LVDS Clock Frequency
6bit	Single/Dual	20MHz to 100MHz
8bit	Single/Dual	20MHz to 100MHz
10bit	Single/Dual	20MHz to 85MHz
12bit	Single/Dual	20MHz to 75MHz

Features

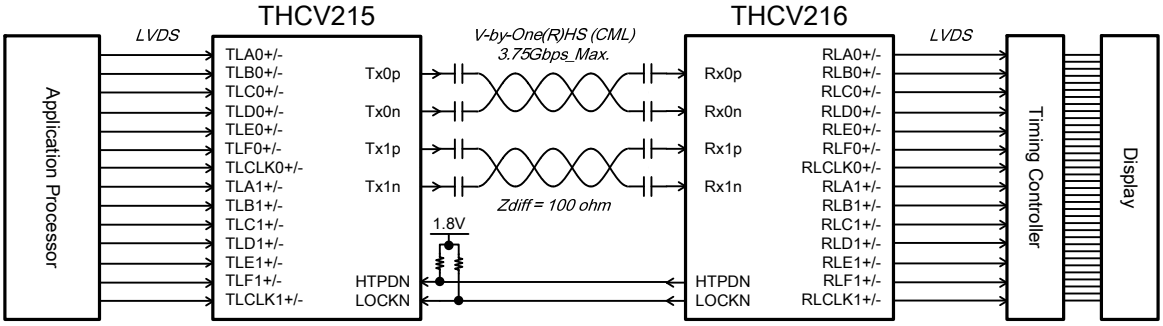
- Color depth selectable: 6/8/10/12 bit
- Single/Dual Link selectable
- AC coupling
- LVDS Input internal termination
- CORE 1.8v, LVDS 3.3v
- Package: 64 pin TSSOP
- Wide frequency range
- CDR requires no external frequency reference
- Supports Spread Spectrum Clocking: Up to 30kHz/±0.5%(center spread)
- V-by-One® HS standard Version1.3 compliant

Block Diagram

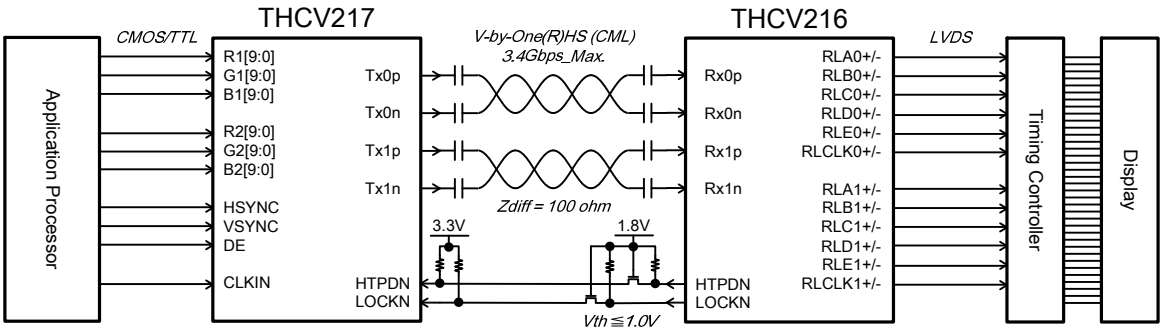


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Example System Diagram



Example for LVDS to LVDS



Example for CMOS/TTL to LVDS

Notices and Requests

1. The product specifications described in this material are subject to change without prior notice.
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6. Despite our utmost efforts to improve the quality and reliability of the product, faults will occur with a certain small probability, which is inevitable to a semi-conductor product. Therefore, you are encouraged to have sufficiently redundant or error preventive design applied to the use of the product so as not to have our product cause any social or public damage.
7. Please note that this product is not designed to be radiation-proof.
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