



TMDS361BPAG Three-Port HDMI Switch

General Description:

The TMDS361B is a three-port digital video interface (DVI) or high-definition multimedia interface (HDMI) switch that allows up to three DVI or HDMI ports to be switched to a single display terminal. Four TMDS channels, one hot-plug detector, and a digital display control (DDC) interface are supported on each port. Each TMDS channel supports signaling rates up to 3 Gbps to allow 1080p resolution in 16-bit color depth. TMDS361B is not intended for source side applications such as external switch boxes.

The TMDS361B provides an adaptive equalizer for different ranges of cable lengths. The equalizer automatically compensates for intersymbol interference [ISI] loss of an HDMI/DVI cable for up to 20 dB at 3 Gbps.

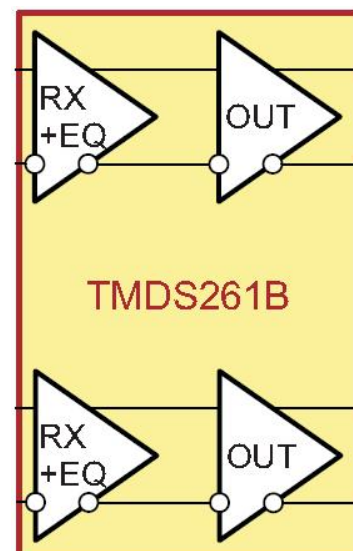
When any of the input ports are selected, the integrated terminations (50- Ω termination resistors pulled up to VCC) are switched on for the TMDS clock channel, the TMDS clock-detection circuit is enabled, and the DDC repeater is enabled.

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Key Features:

- 3:1 Sink-side switch Supporting DVI Above 1920 x 1200 and HDMI HDTV Resolutions up to 1080p With 16-Bit Color Depth
- Designed for Signaling Rates up to 3 Gbps
- Supports HDMI 1.3a Specification
- Adaptive Equalization on inputs to support up to 20-m HDMI Cable at 2.25 Gbps for 1080p 12-Bit Color Depth
- TMDS Input Clock-Detect Circuit
- DDC Repeater Function
- < 2-mW Low-Power Mode
- Local I2C or GPIO Configurable
- Enhanced ESD. HBM: 10 kV on All Input TMDS, DDC I2C, HPD Pins
- 3.3-Volt Power Supply



- Temperature Range: 0°C to 70°C
- 64-Pin TQFP Package: Pin-Compatible With TMDS351
- Robust TMDS Receive Stage That Can Work With Non-Compliant Input Common-Mode HDMI Signal

Applications:

- High-Definition Digital TV
- LCD
- Plasma
- DLP™

Related Products Information:

Mfr Part #	Farnell #	Newark #	Description
TMDS361BPAG	1780794	51R4693	Three-Port HDMI Switch