



NXP HDMI 1.4a transmitter TDA19988 in HVQFN64

Deliver 3D full HD in STBs with HDMI 1.4a transmitter

This advanced transmitter enables a 3D set-top box full HD up to 1080p, "x.v.Color", and CEC – at unprecedented power savings, size, and cost.

Key features

- ▶ 3D frame packing, side by side, top-bottom, up to 1080p
- ▶ 60 mW power consumption in 720p 50/60 Hz
- ▶ <20 μ W power consumption in standby mode
- ▶ "x.v.Color" support, including Adobe RGB
- ▶ Embedded CEC without external oscillator
- ▶ HDCP 1.4
- ▶ RGB, YCbCr, DDR, ITU656 support
- ▶ Two I²S-bus audio input channels, one SPDIF channel
- ▶ Software drivers
- ▶ HVQFN64 package (9 x 9 x 0.85 mm, 64 pins)

Key benefits

- ▶ HD ready and Full HD 1080p 3D solution
- ▶ Extremely low power
- ▶ Optimized BoM
- ▶ Flexible design-in for easy system integration
- ▶ Fast time-to-market
- ▶ Small size, easy layout, designed for two-layer PCB
- ▶ User-friendly design tools

Applications

- ▶ STBs
- ▶ Media boxes
- ▶ Low-cost systems that use a two-layer PCB

This HDMI 1.4a transmitter, housed in a 64-pin HVQFN package, enables 3D-capable set-top boxes at a lower price point. Housed in a 64-pin HVQFN package, the device helps reduce cost by making it possible to use an inexpensive, two-layer PCB design with a full 24-bit RGB interface. For added convenience, the device is HDMI, HDCP, and CEC certification compliant.

Development tools

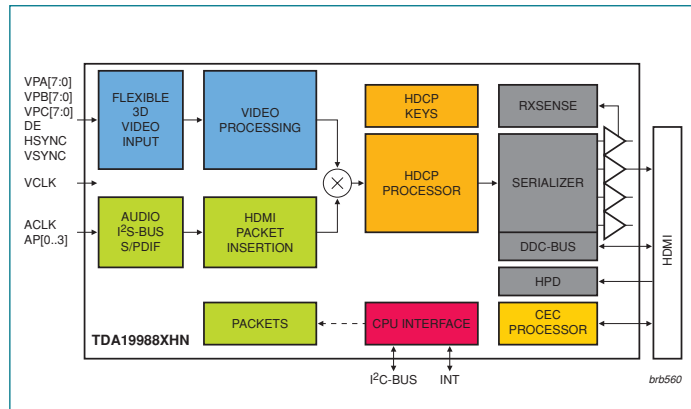
The development kit includes an evaluation board and a standard schematic and layout, as well as Android and standard drivers with example applications.



Authorized Test Center (ATC)

NXP's ATC laboratory, located in Caen, France, qualifies and certifies devices according to HDMI, HDCP, and CEC requirements.

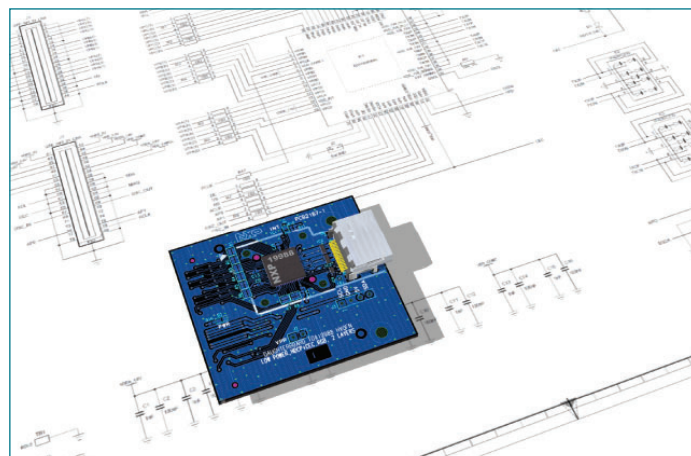
TDA19988xHN block diagram



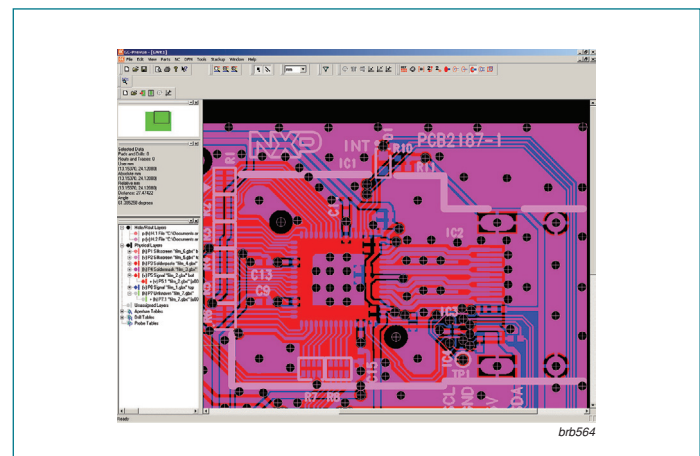
Use case: set-top box, media box



Evaluation tool includes an evaluation board and a standard schematic and layout, as well as Android and standard drivers with example applications



The HVQFN64 version enables a low-cost, two-layer PCB design



Type number	Description	Package
TDA19988AHN	NXP HDMI 1.4a transmitter with HDCP encryption engine	HVQFN64 (9 x 9 x 0.85 mm, 64 pins)
TDA19988BHN	NXP HDMI 1.4a transmitter without HDCP encryption engine	HVQFN64 (9 x 9 x 0.85 mm, 64 pins)



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