

STDP4320

DisplayPort1.2a Splitter

■ GENERAL DESCRIPTION

STDP4320 is a high-speed DisplayPort dual mode splitter / De-multiplexer targeted for audio-video de-multiplexing and routing purposes in applications such as notebook, docking station, video hub and 4K2K displays etc. It consists of one dual mode input port and two dual mode output ports configurable as either DP or AC-coupled HDMI.

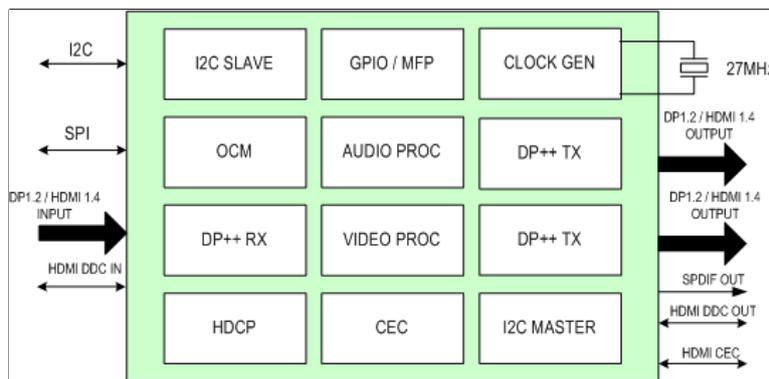
STDP4320 is a VESA DP Standard Ver. 1.2a compliant device, supporting advanced features such as MST, HBR2, 3D formats and GTC assist. This device receives DP MST format up to eight audio-video streams, which can be further routed on either of the two outputs in any combination depending on the application. The output signaling can be DisplayPort or TMDS. This device can also replicate the incoming video on both output ports simultaneously, thus allowing cloning of a 4K2K 60 Hz DP input on two connected sinks. In HDMI port configuration it supports maximum TMDS character clock of 320MHz for video resolution up to 4K2K 30Hz.

STDP4320 supports RGB or YCbCr colorimetric formats with color depth of 16, 12, 10, and 8 bits. It provides secure reception and transmission for the protected audio-video content compliant with HDCP 1.x protection scheme.

■ FEATURES

- DisplayPort1.2a dual mode receiver
- Two DisplayPort1.2a dual mode transmitters
- HDMI/DVI operation up to 320MHz
- SPDIF audio output
- Max video resolution 4K2K60Hz
- Multi-stream support up to 8 streams
- Steroscopic 3D forwarding
- HDCP1.x repeater with embedded keys
- AUX to I2C bridge for EDID pass through
- Deep color up to 16bpp (RGB/YCC)
- Low power consumption; Active 914mW, Standby 30mW
- 172 LFBGA (12mm x 12mm) package

■ BLOCK DIAGRAM



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