The STDP802x series of ICs provide complete SoC solutions for multimedia monitors and emerging digital display applications. This single-chip solution supports worldwide video and audio standards and boasts proficient handling of video and computer graphic inputs with output resulting in unparalleled image quality. The STDP802x features DisplayPort technology providing high bandwidth and low cost compared to conventional digital interfaces.

This combination of features makes the STDP802x perfect for premium multimedia monitors for worldwide markets.

**Key features**

- Dual 10-bit triple ADCs with capture up to 205 MHz
- Integrated DisplayPort 1.1/HDMI 1.3/DVI 1.0 Rx with integrated HDCP key
- Integrated 3D video decoder
- Next generation true 10-bit Faroudja DCDi Cinema® format processing
- Flexible DDR2 memory interface 32 bits wide
- Advanced PIP feature capabilities
- Faroudja RealColor processing
- Embedded 10-bit dual-channel LVDS or DisplayPort transmitter for WUXGA panel support
- Multi-standard digital and analog audio decoder and postprocessor

**Key benefits**

- Complete SoC solution with exceptional video and audio quality
- First single-chip monitor controller for premium monitors with integrated DisplayPort, HDMI and DVI interfaces
- Multi-standard worldwide analog/digital audio decoder and postprocessor
- Integrated multi-standard worldwide 3D video decoder
- Superior video quality with Faroudja DCDi Cinema® technology
- Full HD video capability up to WUXGA in/out support
- Additional integration of full audio processing, DPMS mode, UARTS, LBADC, 3D-VD, and others to reduce the system BOM costs
### STDP802x system architecture

![Diagram of STDP802x system architecture]

### STDP802x IC features comparison

<table>
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<tr>
<th>Part number</th>
<th>ADC 10-bit 205 MHz</th>
<th>DVI 1.0 Rx</th>
<th>HDMI 1.3 Rx</th>
<th>DP 1.1 Rx</th>
<th>LVDS Tx Dual 10-bit</th>
<th>DP Tx 10-bit</th>
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