

HDMI®2.1 IP Overview

■ Feature

- ☑ Reliable architecture with mass production experience in HDMI2.0

■ Application

- ☑ DTV
- ☑ Camera
- ☑ Drone
- ☑ Surveillance camera
- ☑ Set Top Box

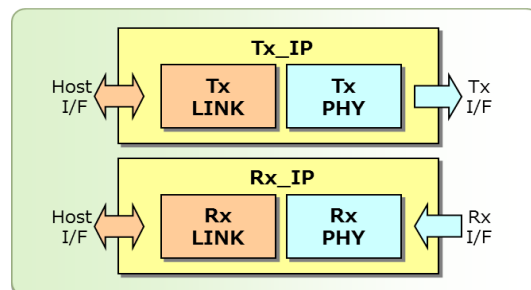
■ Deliverables

- ☑ Verilog-HDL
(RTL source code / Test bench / Functional model)
- ☑ GDS / NETLIST
- ☑ Documents
(Function specification /
Board design implementation guidelines, etc.)

■ Specification

Support Spec	HDMI2.1 / HDMI2.0b / HDMI1.4b
Copyright protection	HDCP2.2 /1.4
Maximum Clock	1.5GHz
Maximum Picture Size	8k4k60Hz 420 10bit (Uncompressed)
Video Format	CTA-861G, VESA-DMT *Note 1, Deep Color 8/10/12bit 3D Frame Packing / Side by Side /Top & Bottom
Color Space	Optional
VRR/Fast V active	Support *Note 2
Dynamic HDR	Support *Note 2
Audio Format	I2S / SPDIF / DSD
eARC	Optional
CEC	Support
Host I/F	AMBA APB v2.0(32bit) / I2C(NORMAL/FAST Mode)
Transmission rate	250Mbps~8Gbps
Port	1port
Operating voltage	Tx : 0.9V/1.8V
	Rx : 0.9V/1.8V/3.3V

■ IP Component



Tx : Transmitter, Rx : Receiver,
PHY : High-speed differential transmission unit
(physical layer)

[Note1] There are some unsupported format at CTA-861G & VESA DMT.

[Note2] Only support EM packet Transmission.

HDMI®2.0 IP Overview

■Features

- ✓ Improved transmission characteristics achieved by our original high-speed differential transmission technology makes device design easy
- ✓ Reliable architecture proved by lots of mass-produced devices(Tx : 14Mpacs, Rx : 10Mpacs)

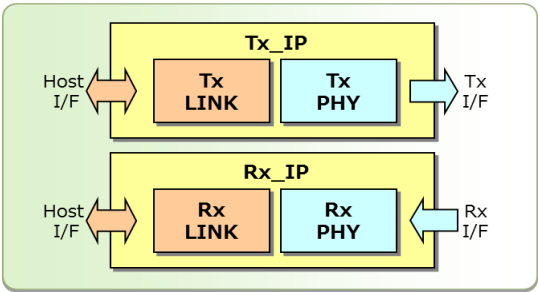
■Application

- ✓ DTV
- ✓ Camera
- ✓ Drone
- ✓ Surveillance camera
- ✓ Set Top Box

■Deliverables

- ✓ Verilog-HDL
(RTL source code / Test bench / Functional model)
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Board design implementation guidelines, etc.)

■IP Component



Tx : Transmitter, Rx : Receiver,
PHY : High-speed differential transmission unit
(physical layer)

■Specification

Support Spec	HDMI2.0b / HDMI1.4b
Copyright protection	HDCP2.2 / 1.4
Maximum Clock	600MHz
Maximum Picture Size	4k2k60Hz 444 8bit (Uncompressed)
Video Format	CEA-861F, VESA-DMT, Deep Color 10 / 12bit (<6Gbps)
Color Space	Support
VRR/Fast V active	Support
Dynamic HDR	I2S / SPDIF / DSD
Audio Format	AMBA APB v2.0(32bit) / I2C(NORMAL/FAST Mode)
eARC	250Mbps~6Gbps
CEC	1port
Host I/F	3.3V / 1.1V

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このカタログの記載内容は2020年9月1日現在のものです。

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