

Color Space Converter(YCrCb2RGB)

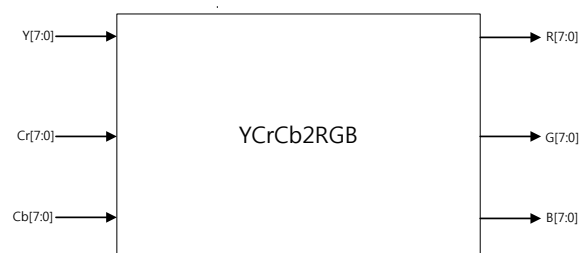
Color Space Converter(YcrCb2RGB) Intellectual Property (IP).

Description

Color space is a simple and robust color definition used in computer systems and the Internet to help ensure that a color is correctly mapped from one platform to another without significant loss of color information. The converters are useful for a number of markets, such as image processing and filtering. Our Color Space Converters provide straight forward, accurate high performance conversion usable in a wide range of video/image applications

Features

- No latency times.
- Simultaneously 3-Color conversion.
- Internal 16-bit precision for accuracy
- Optimized fixed-point conversion
- YCrCb2RGB
 - $R' = 1.164(Y-16) + 1.596(Cr-128)$
 - $G' = 1.164(Y-16) + 0.813(Cr-128) - 0.392(Cb-128)$
 - $B' = 1.164(Y-16) + 2.017(Cr-128)$



Application area	: Wide range of video/image applications (HDTV, PDP&CRT Displays, TFT LCD, etc)
Available documents	: Data Book
Design file formats	: EDIF File Format , VHDL/Verilog Code
Verification	: Verilog Testbench
Simulation tool used	: Model Technology ModelSim™ 6.4