

Color Space Converter(RGB2YCrCb)

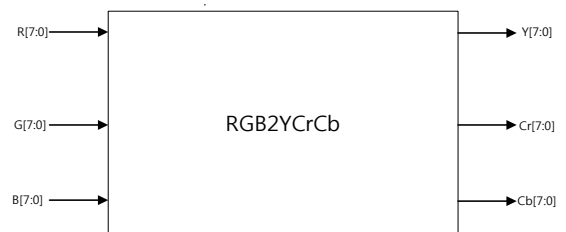
Color Space Converter(RGB2YCrCb) Intellectual Property (IP).

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
- RGB2YCrCb
 - $Y' = 0.257R + 0.504G + 0.098B + 16$
 - $Cr' = 0.439R - 0.368G - 0.071B + 128$
 - $Cb' = -0.148R - 0.291G + 0.439B + 128$



Application area : Wide range of video/image applications

Available documents : Data Book

Design file formats : EDIF File Format , VHDL/Verilog Code

Verification : Verilog Testbench

Simulation tool used : Model Technology ModelSim™ 6.4