

MVIP2230: Motion Adaptive 3D De-Interlacer and Scan Converter

The MVIP2230 Motion Adaptive 3D De-Interlace and Scan Converter Core converts a digital interlaced YUV input to a progressive scan YUV or RGB output. It is a low cost system incorporating both a motion adaptive and interpolative de-interlace engines. It dynamically and automatically adapts operating mode to provide the best video conversion possible. It also senses if input video was sourced from film and adapts the de-interlace algorithms to provide accurate conversion of interlaced NTSC or PAL inputs to progressive scan.

This core utilizes MetaVideo's proprietary pixel-by-pixel adaptive algorithm to produce an accurate conversion of the input video. The apparent resolution is enhanced by this process creating a picture that appears smooth, even on diagonal lines and along the edges of circles.

De-Interlaced images are required for digital LCD Flat Panel Displays and are desirable in many other high quality applications. In addition, this core can be combined with MetaVideo's decoding, scaling, and other cores to accommodate virtually any video imaging application.

Path width options include 8, 9, and 10 bits. With our library of other video modules, MetaVideo stands ready to customize this module to your precise needs.

Features:

- Motion adaptive 3D de-interlacing
- Film mode operation
- Automatic detection and selection of optimal operating modes for both film modes and motion adaptive modes
- Low gate counts
- User selectable Pixel Clock
- Superior rendition of circles and diagonal lines
- Seamless interface with other MetaVideo cores

Applications:

- Enhanced Digital TV/HDTV
- Digital Input LCD Displays
- Projection Systems;
- Progressive scan DVD players

Specifications:

- 16 / 20 bit (4:2:2) YUV input
- Optimal multiplexing at 24 / 30 bit (4:4:4) YUV input
- RGB output standard, other formats available

