

## MVIP2030 Video Decoder with 3D Comb Filter

### Overview

The MVIP2030 design core provides NTSC and PAL Y/C separation and noise reduction using three-dimensional techniques. (X,Y, and time). The MVIP2030 uses the MVIP2000 5-line comb filter as a “front end” for the 3D processor. Preferred ADC operating frequencies are 40MSPS or 54MSPS, frequencies as low as 27MSPS can be accommodated.

### Features

- NTSC (M, 4.34) and PAL (B, D, G, H, I, M, N, N combination), PAL (60) with automatic format detection
- Supports Two: 8, 9, or 10-bit A/D Converters
- Motion Adaptive 3D Y/C Separation and Noise Reduction
- S-Video Decoder
- Advanced synchronization processing for VCR fast forward, backward, and pause mode
- YCbCr (4:2:2) output
- Inter-Frame Y and C Noise Reduction
- Programmable chroma delay for Y/C separated video input
- Selectable 2D Y/C separation mode with Inter-Frame Y and C Noise Reduction
- Clock generator.
- Embedded Y coring, Vertical enhancer, Peaking filter, and Noise Detection
- Core power voltage of 2.5 V
- Supports external SDRAM from 16Mbits to 64Mbits
- Programmable white peak control for the Y or Composite
- VBI data pass through