

Video Scalers

Our video scalers are some of our most popular IP Cores. We offer a versatile range of video scalers that can convert any input video resolution to any output video resolution. Range of IP includes:

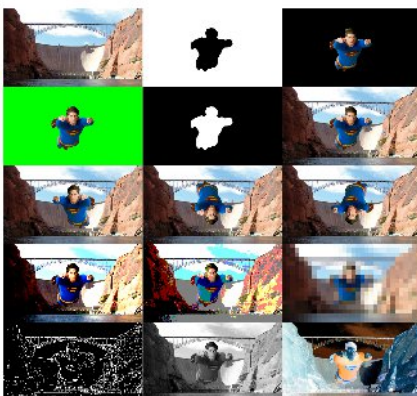
- Basic bilinear scalers
- High-quality polyphase scalers
- Variable-tap for larger scaling ratios
- Programmable in real-time
- No frame buffer required



Image Processing and Special Effects

Extensive range of special effects and image processing functions available. Contact us to discuss your specific requirements. Example capabilities include:

- Colour-space conversion (e.g. YUV → RGB)
- Bayer to RGB conversion
- Gamma correction
- Chromakey and masking operations
- 2D transforms: e.g. flip, skew, rotate, wipe
- Image enhancement: e.g. hue, contrast, brightness, sharpen, desaturate, colorize
- Image filters: e.g. invert, pixelize, posterize, edge detection, textures, bump maps



Text and Graphic Video Overlays

High-quality anti-aliased text and 2D-graphics overlays. Simple to implement with no complex graphics programming required. Ideal for:

- Text or console windows
- Interactive displays and menus
- Gauges, dials, counters, charts and HUDs
- All types of OSD (On-Screen-Display)



Video Deinterlacing

Convert interlaced video formats to fully progressive video. Ideal for converting 'legacy' standard definition formats to high-def

- Choice of deinterlacing algorithms
- Fully motion adaptive
- All interlaced formats supported



Video Decoders, Encoders and Interfaces

Video decoders and encoders for parallel and serial digital video standards. Physical video interfaces and cross-conversion between various formats. Experience includes:

- BT.656, SMTPE 274M, SMPTE 292M etc.
- SD, HD and 3G SDI serial interfaces
- HDMI/DVI parallel HD interfaces

Frame Buffers and Genlocks

Essential for most video processing applications, the video frame buffer stores input video frames for subsequent processing and display. Our video frame buffer is:

- Compatible with all memory types
- Suitable for very high video bandwidths
- Ideal for synchronizing multiple video sources or adapting to different input and output frame rates
- May be modified to allow genlocking to an external video timing signal



Video Overlays

Overlay any number of video sources onto the same display. Ideal for all types of PiP and multi-window formats. Includes support for:

- Alpha blending
- Dynamic video window movement
- Bitwise operators such as AND, OR and XOR



More information

More detailed information and full PDF datasheets of our video IP cores may be found on our website.

Click on the following link for more details:

IP Cores currently available