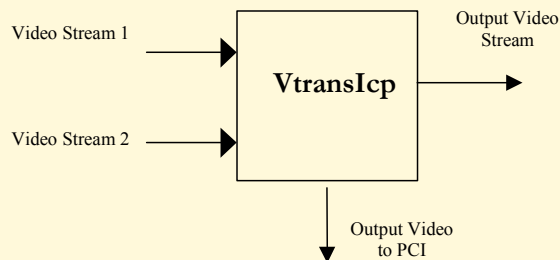


VtransIcp is a TSSA compliant software library for scaling, deinterlacing, color conversion and displaying video images via the image co-processor of TriMedia.



# VtransIcp

## Description

The TriMedia video transformer library simplifies the filtering and display of video images. It supports horizontal and vertical scaling, color conversion, anti-flicker and de-interlace filtering. VtransIcp can write the output either to the SDRAM of TriMedia or it can send the output image via PCI bus, for example to the video buffer of a graphics card in a PC.

## Applications

- Video Conferencing applications
- Applications where dynamic image scaling is required.

## Documentation

A detailed document describing the application program interface (API) and the internal behaviour of the component is available.

## Features:

- YUV to YUV vertical scaling
- YUV to YUV horizontal scaling
- YUV to RGB horizontal scaling and color conversion, with optional overlay and bitmask. The output can be SDRAM or PCI
- De-interlace filtering(YUV interlaced to YUV progressive scan)
- YUV anti-flicker filtering
- YUV 422 to 420 conversion.
- YUV Planar to YUV Sequential Conversion.
- DVP Compatible.

# VtransIcp

## Technical Information

### Memory Usage

Static Memory	40.2 K Bytes
Dynamic Memory	884K Bytes for (PAL, 422 input, typical).

### Processor Load

Insignificant

### Memory Bandwidth

May require significant memory to accommodate bandwidth requirements.

### Other Information

Supported Processors	TM-1100, TM-1300
Component Version No.	2.3
Build with compiler version	V5.7.1 of tcs2.2-dvp0003WinNT

### Related Trimedia TSSA Software Components

VdigVi, VrendVo

### Example Programs

This library is shipped with two example program that demonstrates the use of the component. The first example `exolVtranIcp` demonstrates the capture of real-time video using Video Input Unit of the Trimedia Processor and then scaling/filtering and color conversion to RGB and sending the output image via PCI bus, to the video buffer of the graphics card in a PC. The second example `exolVtransIcpVo` demonstrates using two instances of `VtransIcp` and dynamic scaling/filtering of the video streams and then displaying them on a TV screen as one video stream overlaid over the the other using the Video Out Unit of the Trimedia processor.

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