

The VdecJpeg component is a JPEG image decoder. It decodes a baseline or progressive JPEG image file and outputs YUV 4:2:0 and 4:2:2 image data as per the standard ISO/IEC 10918.

VdecJpeg



Description

The VdecJpeg component is a JPEG image decoder. It decodes a baseline or progressive JPEG image file and outputs YUV image data as per the standard ISO/IEC 10918.

JPEG is a widely used lossy image compression standard to store continuous tone images.

The component is capable of decoding multiple JPEG files.

The VdecJpeg decoder is capable of decoding images of any dimension as long as the number of pixels in the image is restricted to a maximum of 16M pixels.

The component can perform downscaling of the baseline JPEG image. The scaling dimensions are only limited by the available memory.

Applications

- Photo Album Viewer

Documentation

Detailed documentation of the VdecJpeg component is available.

Features

- Decodes baseline and progressive JPEG files
- Output is YUV 4:2:0 and 4:2:2
- Supports decoding of multiple JPEG files
- Supports downscaling
- TSSA compatible

VdecJpeg

Technical Information

Memory Usage

Static Memory	179.198kBytes
Dynamic Memory (excluding pSOS task stack size)	
• Total for Input and Output packet:	904 kBytes
• For baseline JPEG:	40.93 kBytes
• For progressive JPEG (4:4:4/4:2:2):	1706.58 kBytes
• For progressive JPEG (4:2:0):	1282.37 kBytes

Processor Load (MIPS)

The VdecJpeg component can decode image sizes of up to 20M pixels/second.

Other Information

Supported Processors	pnx1300
Version number	3.4
Build with Compiler Version	TCS 2.2

Related TriMedia TSSA Software Components

Fread, VrendVO

Example Programs

The test program, exolPicture, reads a JPEG file, decodes it and displays it on a TV.

The tests that are run by this application are:

1. Open and Close test
2. Start and Stop tests
3. Downscaling tests for user specified dimensions

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