Revolutionary Replacement for MJPEG CODEC

Introduction

VidWare Vision™ Full Frames is a compressor/decompressor for full frames video. It is based on a variant of the H.264 standard that uses high-speed, integer-based algorithms. It is designed for software developers, integrators and all other imaging enterprises. **VidWare Vision™ Full Frames** exceeds the performance levels of existing products based on the legacy methodologies such as Motion JPEG (MJPEG). It allows developers to create state-of-the-art full frames video compression/ decompression capabilities that surpass the quality of legacy CODEC standards. **VidWare Vision™ Full Frames** will augment existing full frames video processing applications and provide leading software companies with advanced capabilities in the digital video industry

Application Areas

VidWare Vision™ Full Frames products will facilitate rapid development and ROI by providing your customers with robust capabilities to meet their fast-growing expectation in the following industries:

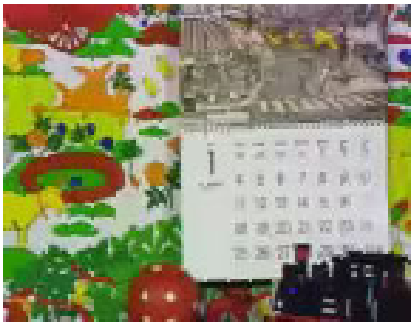
- Professional Video Editing
- Mobile Technology
- Camcorders and Accessory Applications
- Surveillance Video
- Real-time Video Capturing, and many more

Description

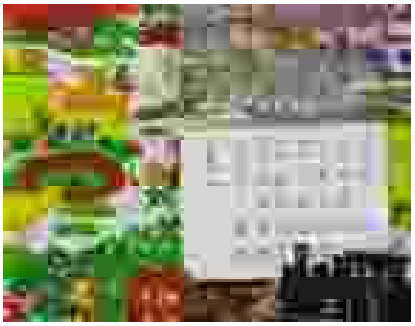
VidWare Vision™ Full Frames can vary the size of the macro-block according to the shape and contents of the frame, unlike MJPEG, that is constrained by 16 X 16 macro-block encoding. This variable macro-blocking produces a drastic reduction of blocky artifacts and greatly increase in the frame image fidelity.

The examples below show the superior quality of a **VidWare Vision™ Full Frames** stream over an MJPEG stream at the same data rate. The clip consists of 30 frames.

Original Uncompressed AVI
Stream Size: 13.9MB
Data Rate: 1.39 MB/Sec



VidWare Vision™ Full Frames
Stream Size: 420 KB
Data Rate: 42 KB/Sec

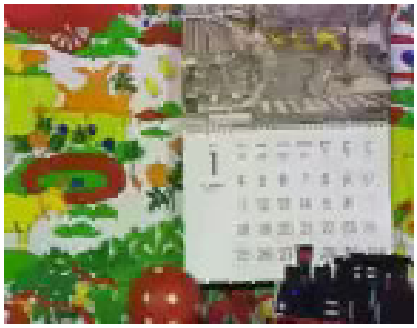


MJPEG
Stream Size: 420 KB
Data Rate: 42 KB/Sec

Continued Overleaf…

The examples below show the reduced data rate requirement of a **VidWare Vision™ Full Frames** stream over an MJPEG stream of similar quality.

Original Uncompressed AVI
Stream Size: 13.9MB
Data Rate: 1.39 MB/Sec



VidWare Vision™ Full Frames
Stream Size: 1.11 MB
Data Rate: 0.11 MB/Sec

MJPEG
Stream Size: 2.61 MB
Data Rate: 0.26 MB/Sec

Features and Benefits

- Results in advanced quality, compression ratio and process speed over the existing MJPEG based products.
- Dramatically reduces the blocky artifacts, typical of MJPEG, by employing a new variable macro-block encoding technology.
- Compresses frames twice as small as MJPEG, with superior quality.
- Maintains the fidelity of the frames at an extremely high compression ratio by utilizing superior edge detection techniques, while saving bandwidth.
- Provides development resource for real-time capture of high quality full frames video.

VidWare Vision™ Full Frames Product Line

In order to meet various customer requirements, **VidWare Vision™ Full Frames** is offered at different levels of flexibility:

► **API/SDK**
VidWare Vision™ Full Frames API/SDK allows for rapid application development of custom applications using VidWare's software components. This API/SDK is licensed with an optional technical support service.

► **DSP Optimized CODEC**
VidWare Vision™ DSP Optimized CODEC will be available as code optimized for integration with a Digital Signal Processor (DSP). This code will maximize the performance of video processing.

► **DirectShow Filters**
DirectShow Filters for **VidWare Vision™ Full Frames** are designed and built based on the DirectX™ DirectShow architecture. These filters allow Microsoft® Windows® application developers to rapidly implement **VidWare Vision™ Full Frames** without the learning curve required by the API/SDK. These filters are made available based on a one-year renewable license arrangement.