

nanoAVC/H.264 DirectShow Encoding SDK

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Introduction

nanoAVC/H.264 Direct Show Encoding SDK enables you to perform high quality and high performance video coding for the latest generation video and audio coding standards. It is intended to develop video encoding / transcoding applications based on Microsoft(R) DirectX/DirectShow(R) technology.

Major Features

- ISO 14496 Part 10 (MPEG-AVC) / ITU H.264 compliance for many profiles and levels
- Encoding of H.264 video streams in Baseline, Main, Extended and High profile
- Encoding of AAC-LC/LTP/MAIN/HE(aacPlus) audio streams with up to 6 channels
- Encoding of AMR-NB audio streams
- Highly optimized software coding with support for latest CPU technology by Intel and AMD (SSE2/SSE3/SSE4 and Dual-Core/Core-Duo, AMD Athlon64)
- Real-time Encoding from Capture cards is supported
- Wide range of applications from Mobile Phones (3GP), Portable Devices (iPod, iPhone, Sony PSP etc) up to Professional HDTV
- Multiplexer for MP4, MOV and 3GP

Documentation

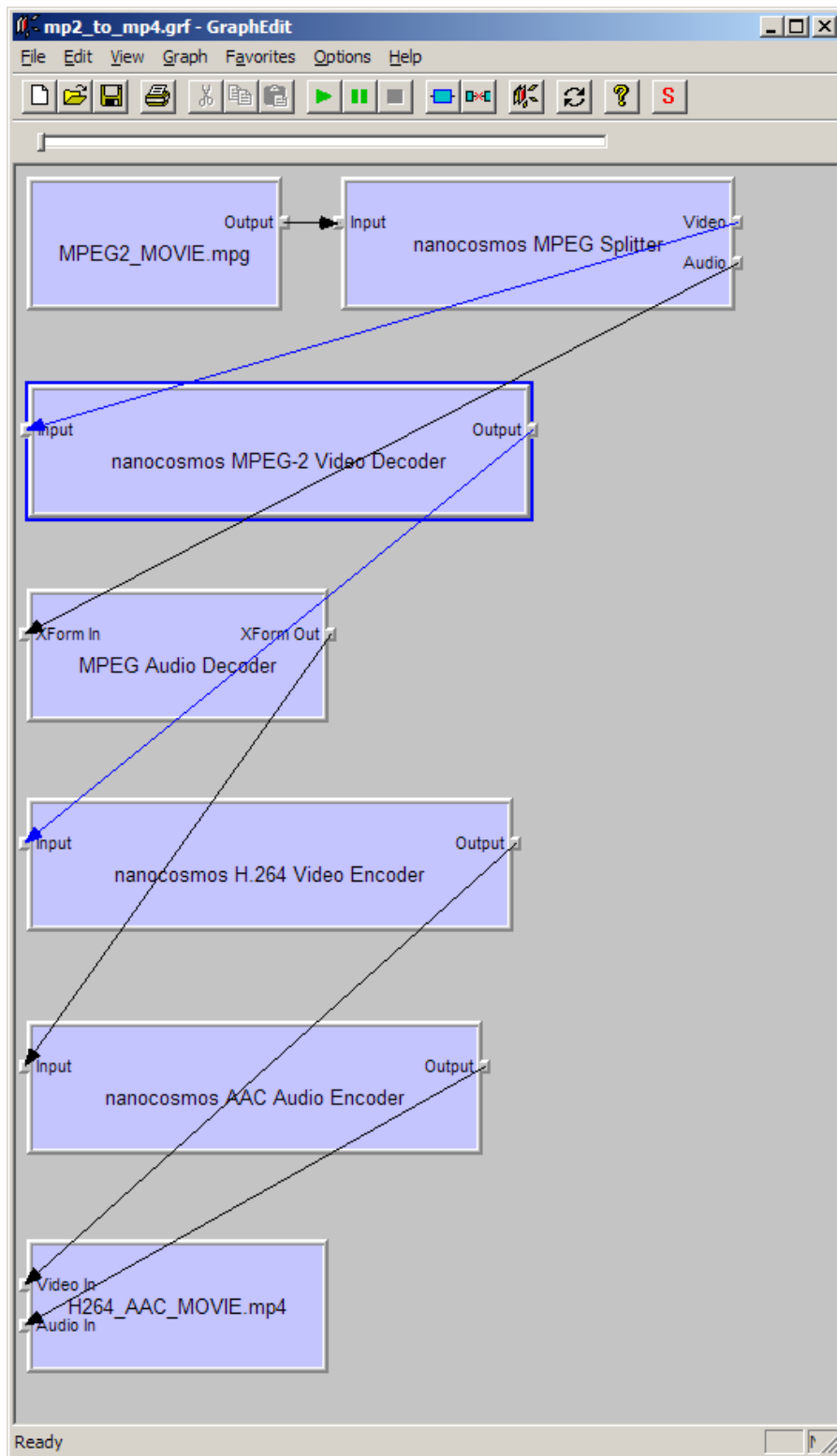
The SDK\doc folder contains the following further documents:

- H.264/AVC Video Decoder
- H.264/AVC Video Encoder
- AAC Audio Encoder
- AMR-NB Audio Encoder
- MP4/3GP Multiplexer

Filter components

- nanocosmos AVC/H.264 Video Encoder
Module: nh264enc.ax
CLSID: {A88889A8-3C2A-4A32-8EAA-755D491D02A0}
- nanocosmos AAC Audio Encoder
Module: naacenc.ax
CLSID: {0296CC21-B78D-416D-846C-45E26CA46A4A}
- nanocosmos AMR-NB Audio Encoder
Module: namrnbenc.ax
CLSID: {10CAB930-E019-41DF-83B7-60D723706B8F}
- nanocosmos MP4 Multiplexer
Module: nmp4mux.ax
CLSID: {78D670BF-49B5-4A3B-BB8C-E2A36E688FCF}
- nanocosmos File Dump Filter
Module: nanodump.ax
CLSID: {DA67A541-8FEA-11D4-A908-00105A6758CF}
- nanocosmos AVC/H.264 Video Decoder
Module: nh264dec.ax
CLSID: {264DA7DD-CE74-472D-A2FD-796A1F0A379C}
- nanocosmos AAC Audio Decoder
Module: naacdec.ax
CLSID: {AEED2B3D-6DA1-4C84-A85D-83547FA90486}
- nanocosmos MP4 Stream Splitter
Module: nmp4splitter.ax
CLSID: {22F493C4-B51B-4767-BE55-ADFA34D6A205}
- nanocosmos MPEG PS/TS Stream Splitter
Module: nmpegsplitter.ax
CLSID: {0994D1E8-B697-47DE-B1E3-36D26937D5B4}
- nanocosmos Color Space Converter
Module: ncolconv.ax
CLSID: {E855821E-C055-4C85-B04F-19F65D5D50FD}
- nanocosmos MPEG TS Writer
Module: nanoTsWriter.ax
CLSID: {2C6E92AB-523E-4C90-8A01-394FC0FC273C}

Figure 1. Example filtergraph



Registering and unregistering components in the DirectShow framework

In order to use them, filters must be registered in the DirectShow framework. After installation all filters are registered. To re-register or unregister components, execute the RegisterFilters.bat or UnregisterFilters.bat batch files from the SDK/bin folder.

Evaluation mode and filter activation

Filters can be activated by installing a license key to windows registry or programmatically by setting a license key through the software interface of a filter instance. How to set license keys to unlock filters is described in the module's documents.

If filters run in evaluation mode, an overlay logo will be shown on video.

Embedding / Customizing nanoPEG technology

Nanocosmos also offers special OEM and customization service. Dependent on your needs, we may offer different models of licensing or application development.

About nanocosmos

nanocosmos informationstechnologien gmbh is a software company providing professional video coding and streaming products. We are partners for digital TV and video/audio streaming for intra- and internet applications. Nanocosmos provides encoding and decoding solutions for any video standard on any platform, with specific expertise in plugin architectures and DirectShow filters. Based on core technology, additional support and development service is available for custom applications.

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