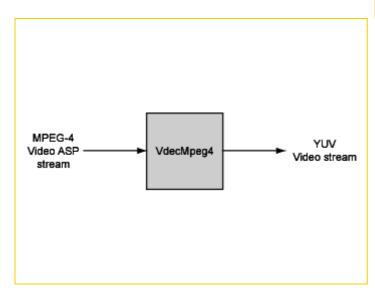
VdecMpeg4

MPEG4 video decoder

Introduction

The VdecMpeg4 component decodes bitstreams encoded in MPEG4 Video Advanced Simple Profile L5 format. The decoder is optimized to handle bitstreams on the 32-bit TriMedia processors.



Key features

- DVP compliant
- ISMA 1.0 profile 0 and 1 compliant.
- Supports Simple Profile Levels 0, 1, 2 and 3.
- Supports Advanced Simple Profile Levels 0, 1, 2, 3, 3b, 4 and 5.
- Optimized for TM3260 based processors (PNX1500, PNX8550).
- DivX 4.x and DivX 5.x compatible.
- Extrapolation of time stamps.
- Fast deblocking algorithm (FaDA).
- Supports XviD



General Information

The VdecMpeg4 component is designed for use in systems that decode MPEG-4 Video Advanced Simple Profile L5 format streams . MPEG-4 Video Advanced Simple Profile L5 streams are described by ISO/IEC.

VdecMpeg4 accepts as input MPEG-4 Video Advanced Simple Profile L5 elementary streams. It outputs a YUV Video stream. The library is optimized for TM3260 based TriMedia processors.

Applications

- MPEG-4 Player
- DivX 4.x / 5.x Player
- XviD Player

Documentation

Detailed documentation of the VdecMpeg4 component is available (Specifications, Architecture Implementation, Test Reports).



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Technical Information

Stream	hit040.m4v	chicago	stigmata	mask
Format	SP, level3,	ASP, level 5,	DX50, AC3	DX50, MP3-
	short header	video only		cbr256, 48 kHz
	(elementary			
	stream)			
Bit rate	400 kbps	4.0 Mbps	3.9 Mbps	3.9 Mbps
Resolution	352-288	720-480	720-480	720-480
Picture rate	30 Hz	24 Hz	24 Hz	24 Hz
# of frames	300	3625	3574	5966
Tools usage				B-frames
Average CPU	34 Mhz	121 Mhz	114 Mhz	149 Mhz
load				
application	tstVdecMpeg4	exolMpeg4	exolMpeg4Avi	exolMpeg4Avi
	(unit test)			
Stream	micha	micha_b2_int	micha_b2_qpel_i	micha_b2_qpel_g
			nt	mc_int
Format	XviD 1.0.2,	XviD 1.0.2,	XviD 1.0.2,	XviD 1.0.2,
	video only	video only	video only	video only
Bit rate	4.0 Mbps	4.0 Mbps	4.0 Mbps	4.0 Mbps
Resolution	720-576	720-576	720-576	720-576
Picture rate	25 Hz	25 Hz	25 Hz	25 Hz
# of frames	6042	6036	6039	6342
Tools usage		B-frames	B-frames,	B-frames,
_			quarter pel	quarter pel, 3-
				point GMC
Average CPU	143 Mhz	147 Mhz	160 Mhz	167 Mhz
load				
Application	exolMpeg4Avi	exolMpeg4Avi	exolMpeg4Avi	exolMpeg4Avi

Environment: PNX1500, CPU running at 300 Mhz, memory running at 200 Mhz

Other Information

Supported Processors	PNX1500	
Build with Compiler Version	tmcc V7.0.1 of TCS	
	V4.51(0022_Windows)	

Example Programs

This library is shipped with an example program that demonstrates the use of the component.

The main use is in the exolMpeg4 and exolMpeg4Avi application. See exolMpeg4 and exolMpeg4Avi Readmes for details.

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