Openmax GST Release Notes



Openmax GST Version 00.06.00.00

Release Notes September 2012

Introduction

This release notes provides important information required in using the Openmax GST software package. This document provides the product information and known issues that are specific to the Openmax GSTsoftware package.

New in this Release

· Defect Fixes

Building OMX GST

- To build the OMX GST package, type the command "make gstomx" from the top level EZSDK directory
- To clean the OMX GST package, type the command "make gstomx_clean" from the top level EZSDK directory

Dependencies

This release is built and verified with the following components and version

- Code Sourcery 2009Q1-203
- Linux kernel 2.6.37
- Linux/PSP 04.04.00.01
- SysLink 02.20.01.18
- HDVPSS 01.00.01.37
- Codec Engine lite 3.22.01.06
- Linux Utils (MFP) 3.22.00.02
- Framework Components lite 3.22.01.07
- OSAL (MFP) 1.21.01.09
- XDAIS (MFP) 7.22.00.03
- H.264 Decoder 02.00.07.00
- MPEG2 Decoder 01.00.05.00
- MPEG4 Decoder 01.00.04.00
- VC1 Decoder 01.00.00.07
- HDVICP API 01.00.00.19

Devices Supported

- DM816x EVM
- DM814x EVM

What is Supported

- Video Decode and Display usecases using TI video codecs H.264 Dec, MPEG2 Dec, MPEG4 Dec and VC1 Dec
- Please refer to the codec user guides for details for supported video codec profiles.
- Video and Audio playback usecases
- 720p60 H.264 decode usecase upto 4 channels
- 1080p30 H.264 decode usecase upto 2 channels
- HDVPSS and V412 modes are supported

Supported/Validated Examples

• Sample GST piplelines could be found at \$OMX_GST_Install_Dir\docs\example_pipeline.sh

What is Not Supported

• DTS Audio decode is not supported.

Fixed in this Release

- SDOCM00094766 4 channel gstreamer decode pipeline from wiki does not work
- SDOCM00087188 [GStreamer+OMX+MP4+h264] stream having baseline profile and 176x144 streams are not playing
- SDOCM00087248 [GStreamer+MOV+MPEG4] Specific stream not played
- SDOCM00089244 [GStreamer+WMV+VC1][Rel 00.04.00.01] all video frames corrupted/distorted
- SDOCM00089451 [GStreamer + mpeg2][Rel 00.04.00.01] mpg video frames not displayed properly using playbin2
- SDOCM00089452 [GStreamer + mpeg2][Rel 00.04.00.01] mpg stream are not played using playbin
- SDOCM00089453 [GStreamer + mpeg2][Rel 00.04.00.01] mpg interlace streams are not played by playbin/playbin2
- SDOCM00091182 Gstreamer pipeline with Interlace option is not working.
- SDOCM00092104 [GStreamer+MPEG2]Green color artifact/patch observed on top of frames during playback
- SDOCM00092211 [GStreamer+MPEG2+AC3+TS] Quality issue:Colored line observed at the bottom of frame during playback
- SDOCM00086004 [DEV_GST_00_03_00] [VC1] vertical padding artifacts observed at right side of video
- SDOCM00085301 [GST 0.2 Beta] Video artifact for MPEG2-ES Interlace, White horizontal line observed bottom of video frame during playback
- SDOCM00085569 [DEV_GST_00_02_00 Beta] [PS+MPEG2] video jerk observed for specific stream
- SDOCM00086004 [DEV_GST_00_03_00] [VC1] vertical padding artifacts observed at right side of video
- SDOCM00089120 [GStreamer+WMV+WMA][REL 00.04.00.01] WMA3, Windows Media Audio 9 /10Professional" is not playing
- SDOCM00091269 A specific stream when played from gstreamer, hangs after few frames.
- SDOCM00091273 A specific stream did not play from gstreamer and hanged.
- SDOCM00091296 For a specific .3gp stream, a lot of frame skips are observed during gstreamer playback.
- SDOCM00091305 For couple of .wmv streams error dsiplayed on console once the EOS is reached.
- SDOCM00091306 For few .wmv streams gstreamer playback starts and hangs after few frames

- SDOCM00091781 Elementary streams are played with higher frame rates in GST playback
- SDOCM00092116 [GStreamer+MPEG2+AC3] Audio stops abruptly and video is jerky(even for 60 fps setting)
- SDOCM00092326 [MPEG4+AMR]: AMR audio pipeline is not working.
- SDOCM00092411 [GStreamer+MPEG2+MP3] For specific customer stream system hangs if played with audio pipeline
- SDOCM00092573 Gstreamer playbin: not able to play the AVC video format stream with base profile
- SDOCM00092575 [MKV+H264+DTS] .mkv customer stream playback will hang

Known Issues / Limitations

- INFORMATION GST playack with playbin2 plugin might not work for few streams.
- INFORMATION Audio playback with 5.1 channels are not supported. [use Audio convertor plugins to convert 5.1 channel to 2 channels]
- SDOCM00096008 Enabling debug mode in a particular GST pipeline command leads to Segmentation fault
- SDOCM00096009 Jerky video output with GStreamer and DEI for an interlaced stream
- SDOCM00096234 System hangs for specific stream(*.mp4) playback using Gstreamer

Validation Information

• This release is validated on DM816x, DM814x EVMs for the above mentioned components.

Technical Support and Product Updates

- For further information or to report any problems, contact http://e2e.ti.com
- GST sample commands are available at http://processors.wiki.ti.com/index.php/ DM81xx_Gstreamer_Pipelines

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