OpenMAX Test Bench (OMTB)

Version 01.00.01.07

Release Notes

Sep 27, 2011

OpenMAX Test Bench (OMTB) is designed for validation of OpenMAX compliant components. OMTB provides support for:

- Configuration of component parameters
- Step by step execution of OMX APIs
- End to end use-cases execution

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1 New In This Release

- Modified the make command to build omtb
- Support for MP3 Decoder component
- Support for display of history commands when omtb is executed in cmd line mode

2 Features supported

- Support for the following usecase/chains
  1) Video Capture -> Deinterlace -> Encode -> FileIO
     FileIO -> Decode -> Scale -> video Display
  2) Audio capture -> G.711 Encode -> G.711 Decode -> Audio Playback
- Support for Mpeg2 Decoder component
- Support for file read, file write for Video Capture, Deinterlace, Scale, video Display components
- Sequentially execution of end to end usecase i.e termination of OMTB
- Support for cmd line mode and scripting mode

  scripting mode: ./<omtb bin> -s <script name> or ./<omtb bin> <script name>

  cmdline mode: ./<omtb bin>
- Support for Centaurus DM814x
- Support for AAC Decoder component
- Support for eos (end of stream) notification

3 System Requirements

This section describes the hardware and software requirement for this release.

3.1 Hardware

- This release has sanity tested on

Netra EVM	DM816x Base EVM and Catalog daughter card
Centaurus EVM	DM814x Base EVM and Catalog daughter card

3.2 Software

- The OMTB release is compiled and tested for the below components:

BIOS	sysbios_6_32_01_38
Code Gen Tools	cgt470_4_9_0
XDC Tools	xdctools_3_22_01_21
Framework Components	framework_components_3_21_01_26
Syslink	syslink_2_00_02_80

XDAIS	xdais_7_21_00_02
IPC	ipc_1_23_03_31
SDK 5.0 OMX Components	5.02.00.09
OSAL	osal_1_21_01_08
Code Sourcery	arm-2009q1-203-arm-none-linux-gnueabi

- **Notes**

4 Installation

4.1 DM81xx

Steps to build the executable

1. Invoke “make components” from EZSDK directory
2. Go to omtb_xx_xx_xx_xx directory
3. Run the following make command

   *“make dm81xxbm **ROOTDIR**=<OMTB INSTALL DIR> **EZSDK_INSTALL_DIR**=<SDK INSTALL DIR> **DEST_ROOT**=<DESTINATION DIR> **OMX_INSTALL_DIR**=<OMX INSTALL DIR>/packages **fc_PATH**=<FC INSTALL DIR**> ce_PATH**=<CE INSTALL DIR> **osal_PATH**=<OSAL INSTALL DIR> **linuxutils_PATH**=<LINUXUTILS INSTALL DIR> **ipc_PATH**=<IPC INSTALL DIR> **syslink_PATH**=<SYSLINK INSTALL DIR> **xdc_PATH**=<XDC INSTALL DIR> **lindevkit_PATH**=<LINUX DEVKIT DIR>/arm-none-linux-gnueabi/usr **CODEGEN_PATH_A8**=<CSTOOL DIR> **uia_PATH**=<UIA INSTALL DIR>*

   ***PLATFORM**=ti816x-evm **or** ti814x-evm”*

4. omtb_dm81xxbm_a8host.xv5T will be created under the following platform specific directory

   If ***PLATFORM**=ti816x-evm*

   <DEST_ROOT >/dm816xbm/bin/ti816x-evm

   If ***PLATFORM**=ti814x-evm*

   <DEST_ROOT >/dm814xbm/bin/ti814x-evm

5. Use “*make clean_dm81xxbm **ROOTDIR**=<OMTB ROOT DIR> **CODEGEN_PATH_A8**=<CSTOOL DIR>*” to clean all the files.

Steps to run the executable

1. Create a folder in the target file system say <target_fs>/home/omtb_01_00_01_07
2. Copy the following into the target folder:
   - omtb_dm81xxbm_a8host.xv5T
   - dm816x_hdvicp.xem3 **or** dm814x_hdvicp.xem3
   - dm816x_hdvpss.xem3 **or** dm814x_hdvpss.xem3
   - syslink.ko
   - ti81xxhdmi.ko
   - prcm_config_app
   - firmware_loader
   - vpss.ko
3. Power on the board, wait for the shell prompt.

4. Run the following commands

- ./ prcm_config_app s
- insmod syslink.ko
- ./firmware_loader 1 dm816x_hdvicp.xem3 start <path mem map file>

or

./firmware_loader 1 dm814x_hdvicp.xem3 start <path mem map file>

- ./firmware_loader 2 dm816x_hdvpss.xem3 start <path mem map file>

or

./firmware_loader 2 dm814x_hdvpss.xem3 start <path mem map file>

- insmod vpss.ko mode=hdmi:1080p-60,hdcomp:1080p-60 i2c_mode=1

  Note: In the above command for DM816x set i2c_mode=1, for DM814x set i2c_mode=0

- insmod ti81xxhdmi.ko

Note: All the run commands mentioned in point 4 can be ignored if they are called as part of board initialization.

- ./omtb_dm81xxbm_a8host.xv5T <OMTB script>

or

./omtb_dm81xxbm_a8host.xv5T -s <OMTB script>

5 Un-installation

- Remove OMTB package from the installed location completely.

6 Release Contents

- OMTB Source Package
- OMTB User Guide
- OMTB Release Notes
- Example Scripts

7 Release Label

DEV_OMTB_01_00_01_07

8 Issues Fixed

In this release

SDOCM00084631	OMTB - Source code is in dos format

In previous releases

SDOCM00084096	OMTB: Mpeg2dec->SC->Display chain is not working for multiple run
SDOCM00083616	OMTB script "decode_scale_display_30fps.oms" needs modification of stream path
SDOCM00081093	OMTB hangs if oms script name is not given while running omtb.
SDOCM00083278	Script mode of execution isn't backward compatible
SDOCM00083279	Path where the Ce bins are generated refers to Ne name in one of the internal dirs.
SDOCM00083667	Segmentation fault is coming for OMTB command line option
SDOCM00083666	Not able to Set the parameter of Indexes. Target hangs after setparam,setconfig.
SDOCM00083525	Not able to get the parameter of Index. Target hangs after getparam and getconfig.
SDOCM00083518	VFCC: Not able to set videoStandard for 720I30,720P30,720P60,720P30, 1080I30 and 1080P30 for tvp.
SDOCM00083669	OMTB command line option will fail with Segmentation fault

9 Limitations

None

10 Known Issues

10.1 OMTB

None

10.2 Dependent Components

None