ITTIAM-WMADEC-UG

User Guide

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Revision History

Version	Date	Changes
1.0	April 28, 2010	Original

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1. Component Placement

Copy Ittiam's OMX IL component to OMX IL audio source directory in Android BSP installation to <android_bsp>/25.xx/mydroid/hardware/ti/omx/audio/src/openmax_il/

2. Build instructions

Modify top-most level of OMX makefile for including Ittiam's OMX IL component builds. Add following lines to the makefile <android_bsp>/25.xx/mydroid/hardware/ti/omx/Android.mk after the comment

```
#call to audio.
      include $(TI_OMX_AUDIO)/wma_dec_ittiam/src/Android.mk
      include $(TI_OMX_AUDIO)/wma_dec_ittiam/tests/Android.mk
```

Build the file system at the top-most level.

```
cd <android_bsp>/25.xx/mydroid
make
```

Note Ensure that PATH environment variable contains path for ARM tool-chain.

Ittiam's OMX IL library gets generated at

```
<android_bsp>/25.xx/mydroid/out/target/product/zoom2/system
/lib/libOMX.ITTIAM.WMA.decode.so
```

Ittiam's OMX IL testbench gets generated at

```
<android_bsp>/25.xx/mydroid/out/target/product/zoom2/system
/bin/WmaDecoder_Test
```

3. Execution instructions

Copy OMX IL component to target's file system at

```
/system/lib/libOMX.ITTIAM.WMA.decode.so
/system/bin/WmaDecoder_Test
```

Run the following commands in the target to execute the component using OMX-IL sample testbench

```
cd /system/bin/

./WmaDecoder_Test <input_file.raw> <outfile.pcm> 0 1 16 1 1
```

Eg:-

```
./WmaDecoder_Test test3_WMA_v9_1pCBR_320kbps_48Khz_2.raw
test3_WMA_v9_1pCBR_320kbps_48Khz_2.pcm 0 1 16 1 1
```

4. Raw file format

The WMA Decoder sample application takes raw file as input. The format of the raw file is as given in the table below.

Field name	Size (bytes)	Remark
Type-Specific Data	28	"Type-Specific data" is present as a part of the "Stream Properties object" in the ASF stream. This data should be provided by the ASF parser. This is required by the decoder to get the Format Tag, Number of Channels, Samples Per Second, Average Number of Bytes Per Second, Block Alignment, Bits Per Sample and EncodeOptions. If your ASF parser provides these information separately repacking them in the format of "Type-Specific Data" is a trivial task. The format of "Type-specific data" is defined in ASF specification (Openly available).
ASF_Packet	packet_size	ASF packet 1
ASF_Packet	packet_size	ASF packet 2
Continued till end-of-file…	packet_size	ASF packet n