SAMPLE

Playback with VQ (Windows Store)

1 Introduction

This sample demonstrates how to build the playback pipeline using AMD's hardware-accelerated Media Foundation Transforms (MFTs) on Windows 8/8.1. This sample also demonstrates how to use AMD's Video Quality (VQ) filter to enhance the video quality in the playback.

2 Using the sample

2.1 Location

`$<installDirectory>\samples\mediaFoundation\playbackVqWinStore\`

2.2 Contents

Package contents

Folder: `$<installDirectory>\samples\mediaFoundation\playbackVqWinStore\`

File name	Description
playbackVqWinStoreWinStore.sln	Solution file for the Playback with VQ Sample using Microsoft Windows 8 UI
playbackVqWinStore.vcxproj	Project file for the Playback with VQ Sample using Microsoft Windows 8 UI
playbackVqWinStore.vcxproj.filters	The file with filter settings for the Playback with VQ Sample using Microsoft Windows 8 UI project
Package.appxmanifest	Contains information that describes properties for the Playback with VQ Sample using Microsoft Windows 8 UI
App.xaml	The markup file for the Playback with VQ Sample using Microsoft Windows 8 UI
MainPage.xaml	The markup file for the Playback with VQ Sample using Microsoft Windows 8 UI
App.xaml.cpp	Source file for the Playback with VQ Sample using Microsoft Windows 8 UI
MainPage.xaml.cpp	Source file for the Playback with VQ Sample using Microsoft Windows 8 UI
App.xaml.h	Header file for the Playback with VQ Sample using Microsoft Windows 8 UI
MainPage.xaml.h	Header file for the Playback with VQ Sample using Microsoft Windows 8 UI
pch.h	Precompiled header files for the Playback with VQ Sample using Microsoft Windows 8 UI
common.cpp	Source file for VQ Helpers functionality
common.h	Header file for VQ Helpers functionality
HardwareCheck.xaml	Markup file for hardware checking
HardwareCheck.xaml.cpp	Source file for hardware checking
HardwareCheck.xaml.h	Header file for hardware checking
BuildingCachePage.xaml	Markup file for building cache pages

File name	Description
BuildingCachePage.xaml.cpp	Source file for building cache
BuildingCachePage.xaml.h	Header file for building cache
playbackVqWinStore_TemporaryKey.pfx	Personal Information Exchange file for storing the certificate and the public and private keys

Folder:
$<*installDirectory*>\samples\mediaFoundation\playbackVqWinStore\Assets\

File name	Description
Logo.png	Resource file
SmallLogo.png	Resource file
SplashScreen.png	Resource file
StoreLogo.png	Resource file

Folder:
$<*installDirectory*>\samples\mediaFoundation\playbackVqWinStore\Common\

File name	Description
StandardStyles.xaml	Resource file

Folder:
$<*installDirectory*>\samples\mediaFoundation\playbackVqWinStore\docs\

File name	Description
MediaSDK_MFT_playbackVqWinStore.pdf	Documentation

2.3 Compile

1. Ensure that the following tools and SDKs are present:
   - Microsoft Visual Studio 2012 on Windows 8/8.1
     If Windows Software Development Kit (SDK) is not installed, install it from http://msdn.microsoft.com/en-us/library/windows/desktop/hh852363.aspx.
2. In Microsoft Visual Studio 2012, open the following solution file:
   <*installDirectory*>\samples\mediaFoundation\playbackVqWinStore\playbackVqWinStore.sln
3. Build the sample:
   - Using Microsoft Visual Studio 2012 Professional Edition, open the playbackVqWinStore.sln solution file.
     The following project is available:
     playbackVqWinStore.vcxproj, for building the playback application
   - To build the solution, select Build > Build Solution.
     The executable playbackVqWinStore.exe is created in the following folder for 32-bit builds:
     <*installDirectory*>\samples\mediaFoundation\playbackVqWinStore\Win32\Debug\playbackVqWinStore\

The executable `playbackVqWinStore.exe` is created in the following folder for 64-bit builds:
`<installDirectory>\samples\mediaFoundation\playbackVqWinStore\x64\Debug\playbackVqWinStore\`

3 Run

The sample can be executed on a Windows 8/8.1 device using an AMD platform that includes the VCE and UVD hardware blocks. To deploy and run the sample, a developer license from Microsoft is required.

To run the sample, press Ctrl+F5.
The following screen is displayed.

- `Open Video File`: Use this option to browse an input media file (for e.g. AVI, MP4, WMV, ASF, MPG, MPEG)
- `Play`: Use this option to play the input media file.
- `Pause`: Use this option to pause the playback.
- `Stop`: Use this option to stop the playback.

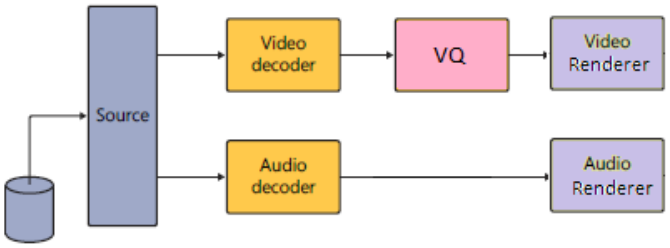
The Input file option displays the path of the input media file.

Many additional options to set various VQ effects on the playback are also provided.

For additional information about using the Windows 8 UI, see the Windows 8 User Experience Guidelines.

4 Implementation Details

The sample implements the following playback pipeline:



Note: The Video Quality filter is supported on only the Southern Islands (SI) and later GPU families. If a different platform/family is used, then the output of the decoder is directly connected to the renderer, bypassing the Video Quality filter. The VQ controls in the user interface are also disabled.

5 Supported formats

The following file formats are supported:

- Input file/container formats: .avi, .mp4, .wmv, .mpg, .mpeg, .asf
- Video decoders supported: H264, MPEG4 part II ,VC1

6 Known limitations

The sample is currently supported on the following platforms:

- Windows 8
- Windows 8.1

Contact

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