

MultiCam for Pico HD 2.0 - Release Notes

31 May 2013

Supported Boards

- PC1840 - Pico HD One
- PC1841 - Pico HD 3G
- PC1842 - Pico HD H.264

Supported OS

Windows

OS Version	Additional Information	
Microsoft Windows 8	x86 (32-bit)	-
	x86-64 (64-bit)	-
Microsoft Windows Server 2012	x86-64 (64-bit)	-
Microsoft Windows 7	x86 (32-bit)	Service Pack 1
	x86-64 (64-bit)	Service Pack 1
Microsoft Windows Server 2008 R2	x86-64 (64-bit)	Service Pack 1
Microsoft Windows XP	x86 (32-bit)	Service Pack 3

Supported Programming Interfaces

MultiCam for Pico HD is supplied as:

- A **32-bit binary library** designed to be used with ISO-compliant C/C++ compilers for the development of 32-bit (x86) applications.
- A **64-bit binary library** designed to be used with ISO-compliant C/C++ compilers for the development of 64-bit (x86-64) applications.
- **DirectShow filters** designed to be used Microsoft Visual C++ compilers for the development of 32-bit (x86) and 64-bit (x86-64) applications.

MultiCam for Pico HD can be used with any development tool and programming languages that support at least one of these interfaces.

Improvements

Reduced display latencies in sample programs

Display latencies have been reduced in the *mchdDialogBased*, *mchdDocumentView* and *mchdYuvAcquisition* sample programs.

This improvement is available since MultiCam for Pico HD 2.0.0.75.

Updated sample programs package

The package of sample programs has been updated with the following contents:

- Visual Studio 2005 project files for all sample programs and a global solution file containing all projects.
- 2 new MFC sample programs, which both allow you to select a board and a video input in a dedicated dialog, then acquires YUV video and displays it in a dialog-based (*mchdDialogBased* sample) or document-view (*mchdDocumentView* sample) MFC project. Controls are provided to Start/Stop and take a snapshot of the video.
- A *TryMe* folder, which contains release 32-bit variants of applications compiled from each sample project.
- A *README.TXT* file, which explains what each sample program does.

This improvement is available since MultiCam for Pico HD 2.0.0.66.

Solved Issues

Half-size acquisition can occur with 720p source

Affected board: PC1842 - Pico HD H.264

When used with 720p video source the video source filter sometimes gives a half-sized stream (upper half of images) for the default resolution. With an H.264 video format, the stream is valid but half-sized. With an YV12 video format, the rendering is wrongly displayed.

This malfunction is solved since MultiCam for Pico HD 2.0.0.55.

H.264 streams do not start with SPS-PPS-IDR

Affected board: PC1842 - Pico HD H.264

The H.264 video streams do not necessarily start with SPS-PPS-IDR frames.

This malfunction is solved since MultiCam for Pico HD 2.0.0.55.

Known Issues

Undue interactions between source filters

Affected boards: PC1840 - Pico HD One, PC1841 - Pico HD 3G, PC1842 - Pico HD H.264

When using several DirectShow graphs on the same board, an input change in one of the source filters (video or audio) causes all other filters associated to this board to also use that new input, even if the graphs are already running. Consequently, this breaks the other graphs which are now capturing on an unexpected input.

Unresponsive source filter after crash/stop when no signal present

Affected boards: PC1840 - Pico HD One, PC1841 - Pico HD 3G, PC1842 - Pico HD H.264

When the application is forcefully stopped or crashes while the graph is running, the source filter gets stuck if no signal is present on the input. Consequently, the system must be rebooted for the filter to be used again.

Uncompressed video formats not rendered correctly on some systems

Affected board: PC1840 - Picolo HD One, PC1841 - Picolo HD 3G, PC1842 - Picolo HD H.264

On some systems, the uncompressed video formats (YV12, YUY2) may not be rendered correctly.

As a workaround, add the “Custom Color Converter Filter” before the video rendered in the DirectShow graph.

Jerky video rendering on some systems

Affected board: PC1840 - Picolo HD One, PC1841 - Picolo HD 3G, PC1842 - Picolo HD H.264

On some systems, video rendering may be jerky.

Frame Number placeholder issues using OSD

Affected board: PC1842 - Picolo HD H.264

When using the OSD feature the Frame Number placeholder (\$\$\$f) does not behave correctly: it wrongly wraps up at 9999 and it is only printed correctly if placed on the first OSD line.