

HD-SDI PCI Express® x4 frame grabber - mvHYPERION-HD-SDI-2

Discontinued



- PCI Express® x4 frame grabber
- Acquisition of 2 independent standard HD-SDI signals or one standard 3G-SDI signal
- Acquisition of up to 2 non-standard HD/3G-SDI signals
- D-Sub 15HD connector for trilevel sync. output, digital outputs, +12 VDC camera supply and RS485 output (half-duplex)

mvHYPERION-HD-SDI is a frame grabber for high-definition cameras with SDI interface. Due to PCI Express® x4 the mvHYPERION-HD-SDI offers a peak capture bandwidth of 1 GB/s. The frame grabber allows operation of up to 2 independent HD-SDI cameras or 1 channel with 3G-SDI.

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- Summary
- Hardware
- Software

- Supported signal formats
- Application areas
- Downloads

Product	mvHYPERION-HD-SDI-2
PCI Express®	x4
Interfaces	2 channels with HD-SDI standard or 1 channel with 3G-SDI on BNC connector RS485 interface for camera control, trilevel sync outputs, dig I/O and camera supply on high density D-Sub connector
Continuous data rate	Approx. 620 MB/s
Peak data rate	1 GB/s
Payload size	Up to 256 Bytes
Scan	Progressive
Permissible ambient temperature	0 .. 45 °C
Permissible storage temperature	-20 .. 70 °C

- PCI Express® x4 interface
- Size (w x l): 111.1 x 155 mm
- 2 channels with HD-SDI standard or 1 channel with 3G-SDI
- RS485 interface for camera control, tri-level sync outputs, dig I/O and camera supply on high density D-Sub connector

- [mvIMPACT Acquire](#)
drivers for Windows® and
Linux® (→)

Acquisition of 2 independent standard HD-SDI signals or one standard 3G-SDI signal

Max. channels	Format	Frequency (fps)	Video timing / video data mapping	Physical layer	Data	Comments
2	1080p	23.98, 24, 25, 29.97, 30	SMPTE ST 274	SMPTE ST 292-1	YUV4:2:2 (2x10Bit)	
1	1080p	50, 59.94, 60	SMPTE ST 425 / Level A	SMPTE ST 424-1	YUV4:2:2 (2x10Bit)	Only channel 0 supported; Firmware version >= 86 required.
2	720p	23.98, 24, 25, 29.97, 30, 50, 59.94, 60	SMPTE ST 296	SMPTE ST 292-1	YUV4:2:2 (2x10Bit)	
2	1080i/psf	50, 59.94, 60	SMPTE ST 274	SMPTE ST 292-1	YUV4:2:2 (2x10Bit)	The host system puts the two fields together to one

frame.

Acquisition of up to 2 non-standard HD/3G-SDI signals

Max. channels	Format	Frequency (fps)	Video timing / video data mapping	Physical layer	Data	Comments
2	1080p	23.98, 24, 25, 29.97, 30	SMPTE ST 274	SMPTE ST 292-1	Raw(2k), Raw(12Bit)	
2	1080p	50, 59.94, 60	SMPTE ST 425 / Level A	SMPTE ST 424-1	Raw(12Bit)	Firmware version >= 86 required.
1	1080p	50, 59.94, 60	SMPTE ST 425 / Level A	SMPTE ST 424-1	Raw(2k)	Only channel 0 supported; Firmware version >= 86 required.
1	1080p	50(100), 59.94(119.88), 60(120)	SMPTE ST 425 / Level A	SMPTE ST 424-1	Raw(2in1)	Only channel 0 supported; Firmware version >= 86 required.
2	720p	23.98, 24, 25, 29.97, 30, 50, 59.94, 60	SMPTE ST 296	SMPTE ST 292-1	Raw(2k), Raw(12Bit)	

Area/Application	32R16	HD-SDI	CLx
Industrial Image Processing			
▶ 2D/3D measurement	■ ■ ■	■ ■ ■	■ ■ ■
▶ OCR, Pattern recognition	■ ■ ■	■ ■ ■	■ ■ ■
▶ control, robotics	■ ■ ■	■ ■ ■	■ ■ ■
▶ visualisation	■ ■ ■	■ ■ ■	■ ■ ■
▶ line camera applications	□ □ □	□ □ □	■ ■ ■
Security			
▶ object surveillance	■ ■ ■	■ ■ ■	■ ■ ■
▶ traffic surveillance	■ ■ ■	■ ■ ■	■ ■ ■
▶ compressed recording	■ ■ ■	■ ■ ■	■ ■ ■
▶ Video sensoric	■ ■ ■	■ ■ ■	■ ■ ■
Microscopy/Diagnostic			
▶ light microscopy	■ ■ ■	■ ■ ■	■ ■ ■
▶ laser scan systems	□ □ □	□ □ □	■ ■ ■
▶ electron microscopy	□ □ □	□ □ □	■ ■ ■
Medicine			
▶ visual dignostic	■ ■ ■	■ ■ ■	■ ■ ■
▶ laboratory systems	■ ■ ■	■ ■ ■	■ ■ ■
Image Capture/Recording			
▶ document line scanner	□ □ □	□ □ □	■ ■ ■
▶ high res area cameras	□ □ □	□ □ □	■ ■ ■
▶ broadcasting	■ ■ ■	■ ■ ■	□ □ □
■ ■ ■ optimum usage due to special features ■ ■ ■ very suitable ■ ■ ■ suitable			

mvHYPERION - application areas


Drivers and applications for Windows 7, 8.1 (mvIMPACT Acquire)

Since version 2.10.1 of mvIMPACT Acquire the "Merge Modules for mvIMPACT Acquire" are available as a separate download.


For this reason the installation packages are smaller now. The Merge Modules are needed for private setup routines, which shall include mvIMPACT Acquire drivers. More details are available in the [mvIMPACT Acquire manuals](#).

 [mvHYPERION x86 2.45.0.msi](#) | 97,580.0 kB

mvHYPERION 32 Bit Windows (7, 8.1, 10)

 [mvHYPERION x86 64 2.45.0.msi](#) | 116,536.0 kB

mvHYPERION-CLm/-CLf 64 Bit Windows (7, 8.1, 10)

 [mvIMPACT Acquire.history](#) | 924.2 kB

mvIMPACT Acquire History-Datei / mvIMPACT Acquire history file

Older driver versions

To be able to watch or download the drivers, you have to be [registered](#) or [logged in](#).

Drivers and applications for Linux 2.6 .. 3.x.x (mvIMPACT Acquire)

 [install mvHYPERION](#) | 38.4 kB

Linux Installer Skript für mvHYPERION devices / Linux installer script for mvHYPERION devices

 [mvHYPERION x86_ABI2 2.38.0.tgz](#) | 11,114.7 kB

mvHYPERION 32 Bit Linux

Official support for Linux 32-bit x86/i386 systems has ended. If a newer version for this architecture is required please get in contact with the [support team](#).

 [mvHYPERION x86_64_ABI2 2.45.0.tgz](#) | 13,729.4 kB

mvHYPERION 64 Bit Linux

 [mvIMPACT Acquire.history](#) | 924.2 kB

mvIMPACT Acquire History-Datei / mvIMPACT Acquire history file

Older driver versions

To be able to watch or download the drivers, you have to be [registered](#) or [logged in](#).

Additional packages for LabVIEW, DirectShow, VisionPro and Halcon

Since version 1.10.69, the **DirectShow®** driver is part of the mvIMPACT Acquire installation package.

Since version 1.10.85, an interface to **VisionPro®** (Cognex) will be installed automatically when installing an MSI based mvIMPACT Acquire driver package.

mvIMPACT Acquire bindings for **HALCON** are available on MVTec's website:


<http://www.halcon.de/download/>

 [LabVIEW acquire-x86-1.6.8](#) | 9,028.0 kB

32 Bit mvIMPACT Acquire Binding für LabVIEW ab Version 6.1 / 32 Bit mvIMPACT Acquire binding for LabVIEW 6.1 or greater

 [LabVIEW acquire-x86 64-1.6.8](#) | 10,980.0 kB

64 Bit mvIMPACT Acquire Binding für LabVIEW ab Version 6.1 / 64 Bit mvIMPACT Acquire binding for LabVIEW 6.1 or greater

 [LabVIEW acquire.history](#) | 7.2 kB

32 Bit LabView Binding History-Datei / 32 Bit LabView binding history file

Manuels

 [mvHYPERION technical manual \(chm\)](#) | 2,722.8 kB

mvHYPERION Technisches Handbuch / Technical Manual

[Hinweis / Note](#)

 [mvHYPERION technical manual \(pdf\)](#) | 2,693.2 kB

mvHYPERION Technisches Handbuch / Technical Manual

 [mvHYPERION technical manual \(html\)](#)

mvHYPERION Technisches Handbuch / Technical Manual

 [mvIMPACT Acquire API C++](#) | 10,458.5 kB

mvIMPACT Acquire API C++ Handbuch / Manual

 [mvIMPACT Acquire API C](#) | 4,077.8 kB

mvIMPACT Acquire API C Handbuch / Manual

 [mvIMPACT Acquire API .NET](#) | 7,726.0 kB

mvIMPACT Acquire API .NET Handbuch / Manual

Datasheets

 [mvHYPERION-Series e 2016-07 MR](#) | 4,661.5 kB

Datenblatt / Datasheet mvHYPERION

Subject to change without notice, Date 07/2014

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