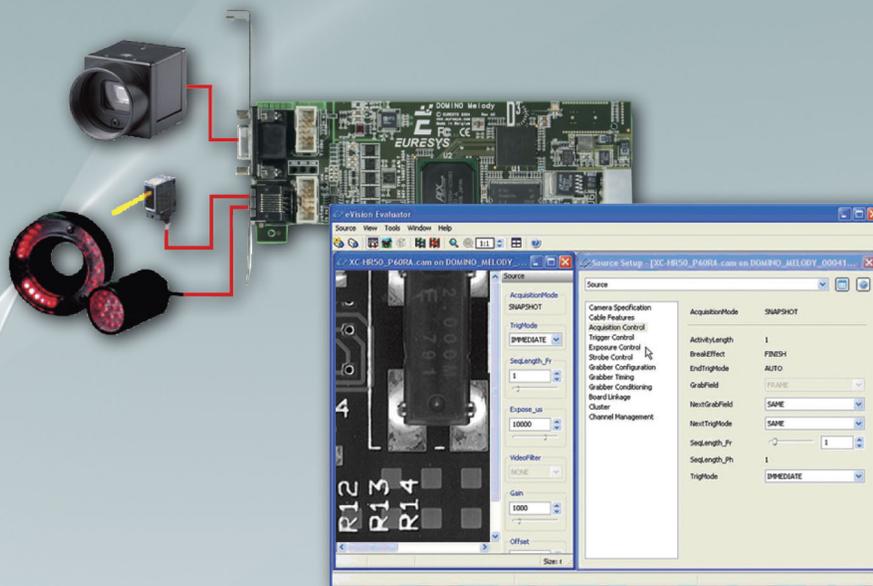


# MultiCam<sup>TM</sup>

**Release Notes MultiCam 6.3.0.92  
September 2, 2008**



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## Environment

### Supported Boards

PICOLO series	DOMINO series	GRABLINK series
Pico Pico Junior 4 Pico Pro 2 Pico Pro 3 Pico Tetra Pico Jet-X Pico Tymo Pico Alert (PCI) Pico Alert PCIe Pico Alert Compact (PCI) Pico Alert Compact PCIe Pico Alert RC (PCI) Pico Alert RCRB (PCI) Pico Alert RCRB PCIe Pico Diligent (PCI) Pico Diligent Plus (PCIe)	Domino Iota Domino Alpha 2 Domino Delta Domino Melody Domino Harmony Domino Symphony (PCI) Domino Symphony PCIe	Grablink Value (PCI) Grablink Value cPCI Grablink Expert 2 (PCI) Grablink Expert 2 cPCI Grablink Avenue Grablink Express Grablink Quickpack ColorScan Grablink Quickpack CFA Grablink Quickpack CFA PCIe

### Supported OS

OS Version	Additional Information	
Windows Vista	32-bit	—
Windows Server 2003	32-bit	Service Pack 1
Windows XP	32-bit	Service Pack 2
Windows 2000	—	Service Pack 4
SuSE Linux Enterprise Server 10.0	32-bit	Kernel 2.6.16.21-0.8

PAE —Physical Address Extension— is not supported.

Power saving modes of the operating systems (StandBy, Sleep, Suspend...) are not supported.

## Supported IDEs

### ***Using MultiCam with C++***

- Microsoft Visual C++ 2005
- Microsoft Visual C++ .NET 2003
- Microsoft Visual C++ 6.0
- Borland C++ Builder 2006
- Borland C++ Builder 6.0
- gcc c++ 4.1.0-28.4

### ***Using MultiCam with .NET***

- Microsoft Visual C# 2005
- Microsoft Visual C# .NET 2003

### ***Using MultiCam with ActiveX***

- Microsoft Visual Basic 6.0
- Borland Delphi 2006
- Borland Delphi 6.0

### ***Using MultiCam with C***

- Microsoft Visual C++ 2005
- Microsoft Visual C++ .NET 2003
- Microsoft Visual C++ 6.0
- Borland C++ Builder 2006
- Borland C++ Builder 6.0
- gcc 4.1.0-28.4

### ***Using DirectShow (Piccolo series)***

- Microsoft Visual C++ 2005
- Microsoft Visual C++ .NET 2003

## MultiCam 6.3

### *New Products*

#### Grablink Quickpack CFA PCIe

Grablink Quickpack CFA PCIe is a flexible, high-performance image acquisition and pre-processing board, dedicated to area-scan color inspection. Grablink Quickpack CFA PCIe interfaces with Base configuration Camera Link area-scan cameras up to 85 MHz. It has a 128 MB memory and features nine general-purpose I/O lines. Grablink Quickpack CFA PCIe is a 4-lane PCI Express frame grabber and offers a data delivery bandwidth of 320 MByte/s.

### *Improvements*

#### Documentation

##### ***New table of contents for Grablink Quickpack CFA***

The TOC have been revised. The new TOC allows users to quickly access desired topics more effectively. For example, the commonly used topics are grouped in the first level rather than a few levels down.

*This improvement is available since MultiCam 6.3.0.49.*

##### ***Revised LUT chapter***

The LUT chapter has been revised.

*This improvement is available since MultiCam 6.3.0.49.*

#### MultiCam

##### ***Driver***

MultiCam 6.3 is the first MultiCam version supporting Grablink Quickpack CFA PCIe.

##### ***Trigger decimation feature***

The following parameters are used for trigger decimation:

- TrigDelay\_Pls
- NextTrigDelay\_Pls

This feature is only available for Grablink Quickpack CFA PCIe.

##### ***Camfile identification header***

Starting from MultiCam 6.3, the new directive **Board** will replace the old **MPF** directive. However, the MPF directive is still supported.

### Example of a CAM file header

```
.*****  
,  
; Camera Manufacturer: My Cameras  
; Camera Model: ProgressiveFR  
; Camera Configuration: Progressive Free-Run Scanning, Analog synchronization  
; Board: Domino_Alpha_2  
; Board: Domino_Iota  
.*****  
,
```

## Solved Issues

### All MultiCam Boards

#### **Second channel can not be disposed**

When two channels are used, calling the dispose method of the second channel is not possible without freezing the application.

*This malfunction is solved since MultiCam 6.3.0.92.*

#### **Application .NET C# hangs**

.NET C# application crashes while running in mscorlib or in mscorwks. The call stacks identify the CallbackDestructor function as the source of the crash.

*This malfunction is solved since MultiCam 6.3.0.90.*

### GRABLINK series

#### **Incorrect images were delivered where one column of pixels every two is black**

This issue occurs only when the MultiCam Channel is configured with TapConfiguration = MEDIUM\_2T24, TapGeometry = 1X2, and ColorFormat = RGB24PL.

Only applicable for **Grablink Expert 2**.

*This malfunction is solved since MultiCam 6.3.0.90.*

#### **Incorrect images were delivered where Blue and Green color planes are swapped**

This issue occurs only when the MultiCam Channel is configured with TapConfiguration = MEDIUM\_2T24, TapGeometry = 1X2, and ColorFormat = RGB24PL.

Only applicable for **Grablink Expert 2**.

*This malfunction is solved since MultiCam 6.3.0.90.*

#### **Color plane swapping using ADR**

This problem may occur both on **Grablink Avenue** and **Grablink Express** boards. Color plane swapping occurs with planar color formats when the following operating conditions are met:

1. A planar color format is used, such as RGB24PL.

2. The board is close to its maximum delivery bandwidth.

Take note for the 2<sup>nd</sup> condition:

- Such a condition may be detected when the expected frame rate or line rate appears lower than the value that would be expected.
- The maximum delivery bandwidth may depend of the Motherboard/PCI busses performance.

Only applicable for **Grablink Express** and **Avenue**.

*This malfunction is solved since MultiCam 6.3.0.90.*

#### ***Inoperative value, Dvalmode = DG***

DValMode = DG is not taken into account when using line-scan cameras. The frame grabber behaves as DValMode = DN in any cases, disregarding the effective value of DValMode. This problem does not occur in area-scan cameras. Only applicable for **Grablink Express** and **Avenue**.

*This malfunction is solved since MultiCam 6.3.0.90.*

#### ***PoCL power interruption at first MultiCam initialization***

The power of PoCL cameras is temporarily interrupted when the driver is reopened. Only applicable for **Grablink Express**.

*This malfunction is solved since MultiCam 6.3.0.49.*

#### ***Inoperative PoCL status parameters***

The following PoCL specific parameters did not work properly:

- PoCL\_GroundJumper,
- PoCL\_Mode,
- PoCL\_PowerInput,
- PoCL\_Status

Only applicable for **Grablink Express**.

*This malfunction is solved since MultiCam 6.3.0.49.*

## **PICOLO series**

#### ***Application hangs when there is a long delay between acquisition***

Instantiating and using a source filter after ESFilter.dll has been unloaded by the application could lead to a crash. Only applicable for **Piccolo Diligent** and **Alert**.

*This malfunction is solved since MultiCam 6.3.0.90.*

## **Known Issues**

### **All MultiCam Boards**

#### ***Inoperative TriggerDelay\_us when trigMode is SOFT***

The TrigDelay\_us parameter only affects hardware trigger and does not affect software triggers.

*As a workaround: Use a software timer to manage the acquisition. This workaround is available since MultiCam 6.3.0.90.*

## PICOLO series

### **InvalidCastException when retrieving Surface associated with SignallInfo instance**

When running a .NET application, an `InvalidCastException` exception can be raised while retrieving the MultiCam callback, the Surface associated to a `SignallInfo` instance. Thus, when executing the following statement:  
`Surface currentSurface = signallInfo.Surf.`

There are two workaround:

1. Check if the image can be discarded This exception can be caught in the customer application and the image can be discarded.
2. Repeatedly call `Surface currentSurface = signallInfo.Surf` statement until no exception is raised. Example:

```
bool ok = false;
while(!ok)
{
    try
    {
        surface = signallInfo.Surf;
        ok = true;
    }
    catch(InvalidCastException e)
    {
    }
}
```

Only applicable for **Piccolo Alert**.

*These workaround are available since MultiCam 6.3.0.90.*

### **Piccolo and Piccolo Pro 2 under Windows Vista**

Windows Vista recognizes **Piccolo** and **Piccolo Pro 2** boards as a **Piccolo Pro 3** board. This causes an issue during boards installation, under Windows Vista only.

*As a workaround, use a previous version of MultiCam, as MultiCam 6.2.0.20.*

## MultiCam 6.2

### *New Products*

#### DOMINO Symphony

Domino Symphony is a high-performance frame grabber for industrial applications. Domino Symphony interfaces to four single-tap monochrome analog cameras. It has 10-bit A/D converters operating up to 65 MHz and an on-board 64 MB memory.

Domino Symphony is available in two types:

- Domino Symphony (PCI), a 64-bit, 66 MHz Conventional and offers a data delivery bandwidth of 240 MByte/s.
- Domino Symphony PCIe, 1-lane PCI Express and offers a data delivery bandwidth of 180 MByte/s.

#### PICOLO Alert Compact

Piccolo Alert Compact is a variant of the Piccolo Alert. The 16 video inputs are available on the Sub-D High-density 44 pin female connector, located in the bracket.

Piccolo Alert Compact is available in two types:

- Piccolo Alert Compact (PCI), a 64-bit, 66 MHz Conventional PCI and offers a data delivery bandwidth of 200 MByte/s.
- Piccolo Alert Compact PCIe, 1-lane PCI Express and offers a data delivery bandwidth of 180 MByte/s.

#### PICOLO Alert RC

Piccolo Alert RC is a variant of the Piccolo Alert. The 16 video inputs are available on the internal VEB connectors, located on the PCB.

Piccolo Alert RC is available in two types:

- Piccolo Alert RC (PCI), a 64-bit, 66 MHz Conventional PCI and offers a data delivery bandwidth of 200 MByte/s.
- Piccolo Alert RC PCIe, 1-lane PCI Express and offers a data delivery bandwidth of 180 MByte/s.

#### PICOLO Alert RCRB

Piccolo Alert RCRB (PCI) is a variant of Piccolo Alert RC (PCI) without bracket.

## Improvements

### MultiCam

#### **MultiCam Full and MultiCam Light installers**

MultiCam is now available in two packages:

- **MultiCam Full** installation file for typical and custom installations.
- **MultiCam Light** installation file for runtime installations.

Refer to MultiCam Distribution in the Euresys Boards Documentation for more details.

The command-line installation procedure is updated in the Euresys Boards Documentation.

*This improvement is available since MultiCam 6.2.0.20.*

#### **Functions added in the MultiCam C API**

New functions are added to the MultiCam C API:

- McSetParamPtr
- McSetParamNmPtr
- McSetParamInt64
- McSetParamNmInt64
- McGetParamPtr
- McGetParamNmPtr
- McGetParamInt64
- McGetParamNmInt64

Refer to the Euresys Boards Documentation for more details.

*This improvement is available since MultiCam 6.2.0.20.*

#### **Methods added in the MultiCam C++ and .NET APIs**

The methods MultiCamObject::SetParam and MultiCamObject::GetParam are overloaded to accept new argument types.

Refer to the Euresys Boards Documentation for more details.

*This improvement is available since MultiCam 6.2.0.20.*

#### **Parameter enhancement**

The following parameters have been modified for easier access:

- SurfaceAddr
- SurfaceContext
- TimeStamp\_us

The backward compatibility is guaranteed, but the new usage is recommended. Refer to the documentation for more information.

*This improvement is available since MultiCam 6.2.0.20.*

#### **Number of MultiCam channels**

The maximum number of MultiCam channels that you can create has been increased.

Refer to Channel Creation in the Euresys Boards Documentation for more details.

*This improvement is available since MultiCam 6.2.0.20.*

## Solved Issues

### MultiCam

#### **Board detection failure after driver initialization**

When the MultiCam service is not started, the McOpenDriver function returned MC\_INTERNAL\_ERROR instead of MC\_SERVICE\_ERROR.

*This malfunction is solved since MultiCam 6.2.0.20.*

#### **DMA Violation with Microsoft Driver Verifier activated**

A "DMA Violation" blue screen could occur under certain circumstances when Microsoft Driver Verifier is activated.

*This malfunction is solved since MultiCam 6.2.0.20.*

#### **Driver blocked after several McRegisterCallback calls**

MultiCam driver was blocked when calling the McRegisterCallback function more than once.

*This malfunction is solved since MultiCam 6.2.0.20.*

#### **OverrunCount parameter wrongly available**

The OverrunCount parameter was wrongly available for Picolo and Domino boards.

*This malfunction is solved since MultiCam 6.2.0.20.*

#### **MultiCam installers**

The configuration of Visual Studio IDE was not restored when unselected by user within a "Modify" maintenance installation. The Delphi packages were not removed from Borland installation directory when unselected by user within a "Modify" maintenance installation.

*These malfunctions are solved since MultiCam 6.2.0.20.*

#### **MultiCam Studio initialization**

During initialization, MultiCam Studio started before MultiCam service.

*This malfunction is solved since MultiCam 6.2.0.20.*

#### **MultiCam Studio integer collection display**

Parameters of type "integer collection" were not displayed in MultiCam Studio properties dialog.

*This malfunction is solved since MultiCam 6.2.0.20.*

### Picolo series

#### **Invalid OutputStyle on Picolo Pro 2**

The default value for OutputStyle parameter is ITTL instead of TTL, and you can not change it to TTL. Picolo, Picolo Pro 2, Picolo Pro 3 and Picolo Tetra were affected.

*This malfunction is solved since MultiCam 6.2.0.20.*

## Grablink series

### ***Hactive\_Px and Vactive\_Ln upper boundaries not checked***

Hactive\_Px and Vactive\_Ln upper boundaries were not checked at channel activation.

*This malfunction is solved since MultiCam 6.2.0.20.*

### ***Frame rate limitation***

The frame rate was abnormally low when you used some high resolution cameras on Grablink Quickpack CFA.

*This malfunction is solved since MultiCam 6.2.0.20.*

### ***Wrong operation of the SurfaceIndex parameter***

Setting SurfaceIndex with dynamical descriptor list upload was not correctly supported. Acquisitions were performed in the wrong channel surfaces during the Dynamic DMA activation on Grablink Expert 2.

*This malfunction is solved since MultiCam 6.2.0.20.*

### ***LineRateMode parameter***

The LineRateMode parameter can be set to a new value: Expose. This is only applicable to Grablink Avenue and Grablink Expert 2 boards.

Refer to the Line Rate Modes topic in the MultiCam User Guide of the Euresys Boards Documentation for more details.

*This malfunction is solved since MultiCam 6.2.0.20.*

### ***Available values for the PoCL\_PowerInput parameter***

On Grablink Express, the ON value for the PoCL\_PowerInput parameter was not available but was replaced by AUTO.

*This malfunction is solved since MultiCam 6.2.0.20.*

## Domino series

### ***MC\_SIG\_CLUSTER\_UNAVAILABLE MultiCam signal not generated***

The MC\_SIG\_CLUSTER\_UNAVAILABLE MultiCam signal was not generated when no surface was available during acquisition. Only applicable for Domino Melody.

In addition, acquisition did not restart when a surface became available again.

*This malfunction is solved since MultiCam 6.2.0.20.*

### ***Wrong AcquisitionCleanup level***

The level of the AcquisitionCleanup parameter was not correct, and it did not appear in MultiCam Studio. Only applicable for Domino D<sup>3</sup> boards.

*This malfunction is solved since MultiCam 6.2.0.20.*

### ***SampleTrim parameter range***

Limits did not exist for the SampleTrim parameter to avoid the SampleClk\_Hz parameter to run out of range. Only applicable for Domino D<sup>3</sup> boards.

*This malfunction is solved since MultiCam 6.2.0.20.*

**VideoFilter parameter setting**

The VideoFilter parameter could be wrongly set while a channel was in the active state. Only applicable for Domino D<sup>3</sup> boards.

*This malfunction is solved since MultiCam 6.2.0.20.*

**ExposeTrim parameter**

An internal error occurred if the ExposeTrim parameter was set to value -4 or -5. Applicable for all Domino boards.

*This malfunction is solved since MultiCam 6.2.0.20.*

**CableComp parameter irrelevant for Domino D<sup>3</sup> boards**

The CableComp parameter was removed from Domino D<sup>3</sup> boards as it was not relevant.

*This malfunction is solved since MultiCam 6.2.0.20.*

**AuxResetEdge parameter irrelevant for Domino D<sup>3</sup> boards**

The AuxResetEdge parameter was removed from Domino D<sup>3</sup> boards as it was not relevant.

*This malfunction is solved since MultiCam 6.2.0.20.*

## MultiCam 6.1

### *New Product*

#### Piccolo Diligent Plus

Piccolo Diligent Plus is designed for demanding video surveillance applications, and offers simultaneously full D1 compressed and uncompressed streams on four video inputs. The acquisition rate of 100/120 frame/s or 200/240 field/s is permanently available for PAL/NTSC formats.

An on-board header of four contact-closure inputs, five solid-state relay outputs and a powerful watchdog function are available for your system integration needs.

Piccolo Diligent Plus is a 1-lane PCI Express board, and offers data delivery bandwidth of 180 MByte/s.

### *Solved Issues*

#### Grablink series

##### ***Some trigger signals are lost with Grablink Avenue***

For applications using Grablink Avenue and the Trigger, EndTrigger, PageDelay or EndDelay settings, the trigger signals, that occurred before the end of the period defined by the EndTrigger or EndDelay parameters, were lost to this application.

*This malfunction is solved since MultiCam 6.1.0.6.*

##### ***Inoperative serial communication under Linux***

On Linux, serial communication can not be operated on Grablink Avenue, Grablink Express, and Grablink Quickpack CFA.

*This malfunction is solved since MultiCam 6.1.0.6.*

## MultiCam 6.0

### *New Features*

#### eVision On-Board Licenses

Open eVision, the next version of the Euresys eVision processing libraries, will implement a new licensing scheme. Thus MultiCam does not support the eVision on-board licenses anymore.

#### MultiCam Sample Programs

The MultiCam sample programs are now distributed as a package, independently of the MultiCam drivers. The **Sample Programs** topic in the Euresys Boards Documentation links directly to the relevant page on the Euresys website.

#### EasyMultiCam

EasyMultiCam was the object-oriented version of MultiCam. It was distributed through the eVision package. This interface is now part of MultiCam 6.0, and is documented in the **MultiCam C++/.NET Reference** of the Euresys Boards Documentation. It does not require the eVision libraries installation anymore.

#### Translation Functions

The translation functions ease the transfer of data between MultiCam acquisition and eVision processing tools. These functions, that were previously part of EasyMultiCam, are now included in the sample programs package.

#### Installation Tool

MultiCam is distributed with a new version of its installation tool. This application can be used either with its graphical interface, or called silently by a custom application. The command-line version is fully documented in the MultiCam User Guide of the Euresys Boards Documentation.

#### Supported Cameras Documentation

All supported cameras are listed and described in the Euresys Boards Documentation. Additional cameras are supported from time to time. For these cameras, the documentation and the additional files are available on the Euresys website through two dedicated topics in the documentation. These topics are named **Latest Analog Camera Interfaces** and **Latest Digital Camera Interfaces** respectively.

## MultiCam Service

The following applies from MultiCam 6 and operates on Windows OS.

MultiCam relies on a service named "MultiCam Service". This service is automatically started when the computer boots.

Software should only access MultiCam when this service is started. McOpenDriver() will return MC\_SERVICE\_ERROR if the MultiCam service is not started when called.

## New Product

### Grablink Express

Grablink Express acquires images from **digital cameras** complying with the Camera Link standard. **Line-scan and area-scan**, progressive and interlaced, grayscale and RGB color cameras can be interfaced in applications using a Grablink Express board. Grablink Express is mainly used for industrial applications.

## Improvements

### MultiCam

#### ***New exception condition***

Until version 5.5.0.1, a severe program failure might occur when a channel was activated while a surface was still PROCESSING. Now, any attempt to activate a channel while a surface is PROCESSING returns a MC\_CLUSTER\_BUSY error.

*This improvement is available since MultiCam 5.5.0.1.*

### Documentation

#### ***Dynamic presentation of the MultiCam parameters***

The MultiCam Reference part of the documentation includes a new feature. This dynamic feature allows the user to only expose the part of the documentation relevant for a chosen board series.

*This improvement is available since MultiCam 6.0.*

#### ***All documentation is included in a single file***

All the documentation is distributed as a single chm file. This file also includes the additional PDF files which are viewable from inside the documentation. There is only a single entry point for all the boards and MultiCam documentation.

*This improvement is available since MultiCam 6.0.*

#### ***Internet Explorer supported versions***

Internet Explorer version 5.5 or later must be installed to fully benefit from these new features

*This improvement is available since MultiCam 6.0.*

### **Parameter setting order during channel creation**

Since MultiCam 5.1, the channel creation is more stringent.

A physical board must be assigned to a channel instance. The board to channel assignment must be performed immediately after the channel creation and before applying any other channel parameter setting.

*This improvement is available since MultiCam 5.5.0.2.*

### **All supported cameras are documented in one place**

The documentation of all cameras supported by Euresys frame grabbers is collected and available in one single location.

Previously, the PDF files were available in a separate folder. Now, they are classified, by manufacturer and model, together with the built-in cameras documentation, in the single documentation file available with all MultiCam releases.

*This improvement is available since MultiCam 5.5.0.2.*

### **White balance**

The White Balance documentation has been improved in MultiCam User Guide. Additional specifications have been added for the white balance operation with Grablink Quickpack CFA.

*This improvement is available since MultiCam 5.5.0.1.*

### **I/O documentation for Grablink series**

The I/O documentation has been corrected and improved in all Grablink handbooks.

*This improvement is available since MultiCam 5.5.0.1.*

## **Solved Issues**

### **PICOLO series**

#### **Restarting a channel after a signal loss could crash the application**

With a **Piccolo Alert** or a **Piccolo Diligent**, restarting a channel after a video signal loss could make the application crash after a timeout period of 10 seconds. This behavior was reported only with DirectShow filters.

*This malfunction is solved since MultiCam 6.0.0.0.*

#### **Access violation error when releasing the DirectShow filter**

Releasing a Euresys Source Filter instance while the video signal is lost could sometimes lead to an access violation.

*This malfunction is solved since MultiCam 6.0.0.0.*

#### **Unstable behavior when using the DirectShow filter**

With a **Piccolo Jet-X**, under certain circumstances, the Euresys Source Filter became non-responding after changing the output format several times.

*This malfunction is solved since MultiCam 6.0.0.1.*

#### **System crash when using the property pages of the DirectShow filter**

With a **Piccolo Jet-X**, displaying the property pages while the filter graph was running could lead to a system crash and a blue screen.

*This malfunction is solved since MultiCam 6.0.0.1.*

## DOMINO series

### **Possible blue screen when starting simultaneous applications with several frame grabbers**

A blue screen could occur when you started several applications simultaneously with several frame grabbers.

*This malfunction is solved since MultiCam 5.5.0.2.*

### **Wrong parity with camera Teli CS3920**

The Domino boards randomly acquired frames with the wrong parity after a channel activation on a Teli CS3920 camera.

*This malfunction is solved since MultiCam 6.0.0.0.*

## GRABLINK series

### **Using the rate converter made the RP mode inoperative**

RP mode is inoperative when you activate the rate converter. Only applicable for **Grablink Avenue**.

*This malfunction is solved since MultiCam 6.0.0.0.*

### **Synchronization problem in case of insufficient PCI bandwidth**

Some synchronization issues appear in the acquired image flow when the available PCI bus bandwidth is not large enough. In such cases, the system should have skipped some images to guarantee that the acquired images are not corrupted. Only applicable for **Grablink Avenue**.

*This malfunction is solved since MultiCam 6.0.0.0.*

### **The HFR mode was inoperative on Grablink Avenue**

The HFR —High Frame Rate— mode used for very high-speed acquisitions was inoperative, and behaved as the Snapshot mode. Only applicable for **Grablink Avenue**.

*This malfunction is solved since MultiCam 6.0.0.0.*

### **The windowing feature produced corrupted image**

Activating the windowing feature corrupted the acquired images by introducing high frequency noise in these images. Only applicable for **Grablink Avenue**.

*This malfunction is solved since MultiCam 6.0.0.0.*

### **Inoperative BreakEffect in absence of trigger pulses**

In a system with a **Grablink Avenue**, the parameter AcquisitionMode set to PAGE, BreakEffect set to ABORT and TrigMode set to PULSE, the channel then the ForceTrig are activated, if this channel is set to IDLE before receiving the first line trigger pulse, then it will not stop immediately. Instead, an acquisition failure will occur after a 20 seconds time-out period.

*This malfunction is solved since MultiCam 6.0.0.0.*

### **Application crashes with high horizontal resolution on a Grablink Quickpack CFA**

Configuring a camera through a camfile, with a horizontal resolution set to more than 3840 pixels can lead to a crash of MultiCam Studio or of the application.

*This malfunction is solved since MultiCam 5.5.0.3.*

### **LineIndex not implemented on Grablink Quickpack ColorScan**

The LineIndex parameter was not implemented on Grablink Quickpack ColorScan and always returned a 0 value.

*This malfunction is solved since MultiCam 5.5.0.2.*

**Possible blue screen when starting simultaneous applications with several frame grabbers**

A blue screen could occur when you start several applications simultaneously with several frame grabbers.  
*This malfunction is solved since MultiCam 5.5.0.2.*

**PCI bandwidth issue with Grablink Quickpack CFA**

It has been reported that the effective PCI bandwidth was lower than expected.  
For instance Grablink Quickpack CFA is now capable to deliver RGB24 images at full rate from a 640 x 480, 250 fps, 10 bits/pixel BAYER camera.  
*This malfunction is solved since MultiCam 5.5.0.1.*

**Vertical synchronization and colors issue with Grablink Quickpack CFA**

Sporadic vertical synchronization failures were observed on Grablink Quickpack CFA. With BAYER CFA cameras, this synchronization issue caused abnormal colors since the color registration became incorrect.  
*This malfunction is solved since MultiCam 5.5.0.1.*

**DirectShow****DirectShow filter malfunction in WME environment with Picolo Alert**

In a WME environment, using Picolo Alert with an NTSC camera and the default filter settings can lead the application to stop.  
*This malfunction is solved since MultiCam 5.5.0.2.*

**Known Issue****Documentation****Wrong Drawing in Grablink Avenue Handbook and Grablink Quickpack CFA Handbook**

In Grablink Avenue Handbook and in Grablink Quickpack CFA Handbook, an error was found on **System** connector new drawing. The PGND and +5V pins were inverted.

The correct pinout is:

- The **PGND** signal is available on **pin 17**.
- The **+5V** signal is available on **pin 26**.

*This issue is fixed since MultiCam 5.5.0.2.*