



eBUS™ SDK

High-performance application development toolset, interoperable with GigE Vision®, USB3 Vision™, and GenICam™ compliant devices

Windows and Linux developers can create applications with ease using Pleora's eBUS™ SDK. This comprehensive application development toolset is interoperable with both Pleora and third-party devices supporting GigE Vision, USB3 Vision and GenICam standards, and offers a single interface to communicate with devices over GigE, 10 GigE, wireless, and USB 3.0 links. With the eBUS SDK, vision system designers can reduce development time, get to market quicker, and re-focus developer resources on core business activities.

Video Acquisition

Pleora's eBUS Universal Pro driver augments the general-purpose drivers developed for each Network Interface Card (NIC) and USB 3.0 controller. The eBUS Universal Pro driver assists in transferring video from GigE Vision and USB3 Vision streams to vision system applications, ensuring delivery with low, consistent latency while reducing CPU resource utilization. Compatible with most GigE and USB 3.0 chipsets, the eBUS Universal Pro is ideal for use in high-performance vision systems.

An extensive library of sample applications for device configuration and control; multicast communication; image and data acquisition; image display; and diagnostics ensure developers can be productive immediately. Core to the sample applications is Pleora's NetCommand™ sample application, which demonstrates simultaneous connection and streaming from multiple devices in a single application. This capability is essential for advanced networked vision systems, as the ability to process multiple video streams in a single application can dramatically reduce overall system costs.

What's Included?

- **eBUS SDK** — Allow developers to quickly build high-performance vision applications.
- **eBUS Universal Pro Driver** — Increases image acquisition throughput and performance, decreases latency and jitter, while minimizing CPU utilization.

Features

- Receive and transmit image streams with a single SDK
- Real-time video transfer with low, consistent latency
- Comprehensive set of sample code and documentation
- User interface controls for high-performance display
- GigE Vision 2.0, USB3 Vision 1.0, and GenICam compliant
- Extensive rebranding and repackaging capabilities
- Works seamlessly with Pleora's iPORT™ and vDisplay products, as well as GigE Vision, USB3 Vision, and GenICam compliant products from other vendors

GigE VISION **USB3** VISION

GEN<i>CAM

For more information, visit
www.pleora.com/our-products/ebus-sdk

Pleora
Technologies

eBUS™ SDK

Included Software

SDK and Driver	<ul style="list-style-type: none"> • eBUS SDK – Provides versatile, robust, and easy-to-understand classes, methods, and properties that allow developers to quickly build high-performance vision applications. Support for high performance image acquisition using eBUS Universal Pro Driver or NIC manufacturer's driver. • eBUS Universal Pro driver – Enhances existing general-purpose drivers shipped with NICs and USB 3.0 controllers. Increases image acquisition throughput and performance, decreases latency and jitter, while minimizing CPU utilization.
Documentation and Sample Applications	<ul style="list-style-type: none"> • Quick Start Guides • Class and method documentation • NetCommand sample application – Demonstrates simultaneous connection, streaming, and video display from multiple devices. • eBUS Player application – Demonstrates advanced API features such as serial communication, PLC monitoring and configuration, and management of GigE Vision and USB3 Vision devices in a single application. • Sample applications – Demonstrates advanced networking topics, such as GigE Vision compliant image stream transmission, multicast communication, link recovery, and optimization techniques.
Supported Development Environments	<ul style="list-style-type: none"> • C# .NET, and VB .NET using Visual Studio 2008 and higher, and .NET Framework version 4 • C++ using Visual Studio 2008 and higher • C++ using GCC on Red Hat Linux 6.1

OEM integration

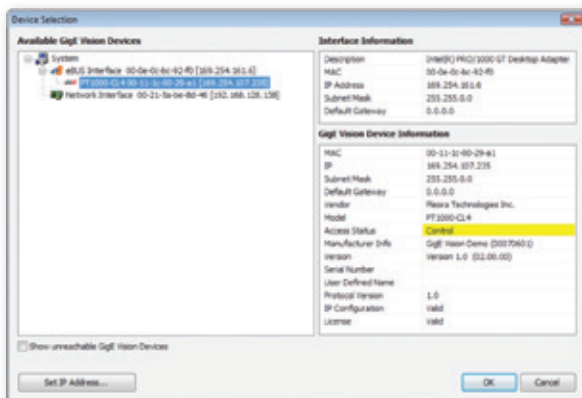
Software	<ul style="list-style-type: none"> • Includes merge modules for inclusion in installation packages built with Microsoft Visual Studio, or with applications such as Flexera Installshield. • Enables you to rebrand executables through a simple change to the included source code.
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Supported Operating Systems

	GigE Vision 2.0	USB3 Vision 1..0
Windows 7 (32 and 64-bit)	Supported	Supported
Windows XP (32-bit)	Supported	Not Supported
Red Hat Enterprise Linux 6 (32 and 64-bit)	Supported	Supported (Q3 2013)

Supported Standards

Protocols	GigE Vision 2.0, USB3 Vision 1.0
Camera control	GenICam



Complete set of user interface controls, including device finder and selection control.



Includes numerous sample applications, such as eBUS Player.

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