DATA SHEET

eBUS SDK

Feature-rich, standards-compliant application development toolset for digital video systems and cameras

Overview

Designed for use in high-performance digital video systems and cameras, Pleora's eBUS™ Software Development Kit (SDK) is a feature-rich toolkit that allows Windows and Linux developers to produce video applications in short timeframes, while reducing risk and lowering design and support costs.

The eBUS SDK is based on a clean, modular architecture that uses a single set of functions to receive video over GigE, 10 GigE, USB, and IEEE 802.11 wireless. This helps "future-proof" application software because it can be modified quickly and easily for different media. It also helps developers work efficiently, and reduces support for portfolios with multiple interface offerings.

Pleora's eBUS SDK features a huge library of sample code, which serves as a quick-start platform for each development project. It also includes the eBUS Universal Pro driver, which helps developers achieve high-performance results by maximizing end-to-end throughput and ensuring video is delivered with low, consistent latency.

The eBUS SDK complies fully with the GigE Vision® , USB3 Vision™ and GenICam™ standards, and is compatible with every version of each. It interoperates seamlessly with Pleora's extensive portfolio of video interface products, as well as with standards-compliant products from other manufacturers.

Custom Solutions

Pleora develops custom video interface solutions based on the field-proven technology in its external frame grabbers and embedded video hardware products. Pleora's expertise in this area is unmatched. We know how to deliver video with performance and reliability over GigE, 10 GigE, USB 3.0, and IEEE 802.11 wireless, and we have a thorough understanding of the GigE Vision® , USB3 Vision™, and GenICam™ video interface standards.

We tailor offerings to accommodate a wide range of requirements, including application-specific connectors, unique features, form factors, on-board processing, and customized software. We can supply turnkey hardware and software, or deliver intellectual property solutions that allow system manufacturers to completely integrate our interface into their equipment.

Pleora uses a robust, end-to-end partnership process to deliver high-quality, customized solutions on time, within budget. This process begins with product conception and extends well beyond market deployment. Even after the product matures, we continue to deliver standards updates and manage component obsolescence.

Features

- Compliant with GigE Vision 2.0, 1.2, 1.1 and 1.0
- Compliant with USB3 Vision 1.0
- Compliant with GenICam 2.3.1, and earlier
- User interface controls for high-performance display
- Receives and transmits image streams from one platform
- Comprehensive set of sample code and documentation
- Extensive rebranding and repackaging capabilities
- Works seamlessly with Pleora's external frame grabbers and embedded video interface hardware, as well as third-party products compliant with GigE Vision, USB3 Vision, and GenICam
- DirectShow filter to enable easy integration of GigE Vision and USB3 Vision cameras with image display, analysis, and compression filters in the DirectShow ecosystem

GiGE VISION USB3 VISION

GEN<i>CAM

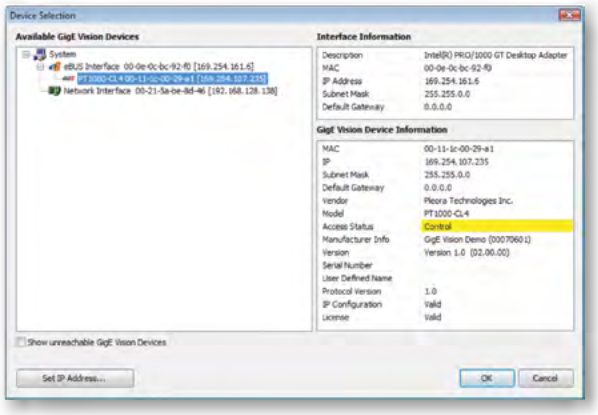
For more information, visit www.pleora.com

Pleora Technologies

eBUS SDK

Included Software

SDK and Driver	• **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. • **DirectShow filter** – enables easy integration of GigE Vision and USB3 Vision cameras with image display, analysis, and compression filters in the DirectShow ecosystem.
Documentation and Sample Applications	• **Quick Start Guides** • **Class and method documentation** • **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	• 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 and Ubuntu 12.04 LTS



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

OEM integration

Software	• 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.

Supported Operating Systems

	GigE Vision 2.0	USB3 Vision 1..0
Windows 7 and Windows 8 (32 and 64-bit)	Supported	Supported
Windows XP (32-bit)	Supported	Not Supported
Red Hat Enterprise Linux 6 (32 and 64-bit)	Supported	Supported
Ubuntu 12.04 LTS (32 and 64-bit)	Supported	Supported

Supported Standards

Protocols	GigE Vision 2.0 (and earlier), USB3 Vision 1.0
Camera control	GenICam

Includes numerous sample applications, such as eBUS Player.

Pleora Technologies Inc.
340 Terry Fox Drive, Suite 300
Kanata, Ontario
Canada, K2K 3A2

Tel: +1.613.270.0625
Fax: +1.613.270.1425
Email: info@pleora.com
www.pleora.com