

COGNEX®

VisionPro 9.7

About This Release

6/2/2021
Version 1.0

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VisionPro

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OMNIVIEW

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CVL Vision Library

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BGA II and BGA III

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Wire Bonder

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About This Release

VisionPro 9.7 contains new or changed features since the previous release of VisionPro 9.6 SR2.

New Features in This Release

This release introduces USB3 Vision acquisition (through the GenTL transport layer) allowing VisionPro applications to acquire images directly through cameras that follow the GenICam Standard. See the following topics in your installed VisionPro documentation for details:

- GenTL Architecture
- Acquiring Images From a GenTL Camera Programmatically
- Acquiring at High Frame Rates
- The **GenTL** tab of the topic Configuring an Image Source
- The **GenTL** section of the topic Limitations

In addition, your VisionPro installation includes a sample Visual Studio solution for GenTL acquisition located in

`%VPRO_ROOT%\samples\Programming\Acquisition\GenTL\USB3\Basler\C#\GenTLUSB3Basler.`

3D Operations Requirements

Your processor must support the AVX2 instruction set for any Cognex 3D operations.

VisionPro supports the **CPUCanExecute3D** method to return **True** if the processor in your computer is capable of executing Cognex 3D operations. Otherwise the method returns **False**. Use the **CPUCanExecute3D** method to verify any computer you use to create or deploy your application can perform 3D operations.

Supported Operating Systems

VisionPro 9.7 supports development and deployment on single or multiprocessor machines using native languages (English, Japanese, German, Korean, and Simplified Chinese) on a variety of Windows 64-bit operating systems.

VisionPro supports 2D vision tools and features on Windows 10 and Windows 10 IoT Enterprise.

VisionPro supports various 3D sensors and 3D vision tools based on your 64-bit operating system:

| 3D Hardware/Feature | Required OS |
|---|--|
| VisionPro with the DS1000 and DS900 series sensors | Windows 10 Pro and Windows 10 IoT Enterprise |
| VisionPro with the DSMax series sensors | Windows 10 Pro |
| 3D-A5000 sensor with A5000 Viewer and 3D HandEye Field Calibrator | Windows 10 Pro |
| CAD Import Tool | Windows 10 Pro |
| Cognex 3DExpress | Windows 10 Pro |

Supported Visual Studio Development Environments

VisionPro 9.7 supports development and deploying using the following compilers that target the .NET Framework version 4.7.2:

- Microsoft Visual Studio 2015 (v. 14.0), Update 3
- Microsoft Visual Studio 2017 (v. 15.0)

Acquisition Platforms

Refer to the VisionPro Camera Support website (<https://www.cognex.com/products/machine-vision/vision-software/visionpro-software/visionpro-camera-support>) for a complete list of cameras VisionPro supports. Be aware that not all acquisition platforms are supported on all operating systems.

- GigE Vision and related performance drivers
- USB 3.0 cameras by means of a GenTL consumer
- 3D-A5000 3D Sensor
- DS1000 Series 3D Sensors
- DS900 Series 3D Sensors
- MVS-851x series (Only MVS-8511, MVS-8511e, MVS-8514, MVS-8514e)
- CFG-8700 series

Security Key Firmware

VisionPro uses a USB security key attached to your computer to ensure the software is properly authorized for use. This release supports firmware version 4.12 for VisionPro security keys. See the topic *Security Key Updates* in your installed VisionPro documentation for how to check the firmware version on your security key.

If you are using a security key with a previous version of firmware, contact Cognex Support for assistance in upgrading to the latest version. Keep your security key firmware up to date to take advantage of the latest features and improvements to Cognex software security.

Find Additional VisionPro Documentation Online

The [VisionPro Support website](#) contains additional VisionPro documentation not included with your VisionPro installation.

Needed Instruction Sets

The following table lists the specific instruction set your processor must support for various vision tools:

| Tool | Instruction Set | Notes |
|-----------|-----------------|--|
| PMAlign | SSE4.1 | Instruction set needed for 16-bit image analysis only |
| PMRedLine | SSE4.1 | |
| 3D PatMax | AVX2 | Any AVX instruction sets prior to AVX2 are not sufficient for 3D operations. |