

COGNEX®

VisionPro 9.22 SR1

About This Release

11/1/2024
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 9.22 SR1 contains new or changed features since the previous release of VisionPro 9.21 SR1.

New Features in This Release

This release supports the following new features:

- This release adds support for acquiring images with the Cognex 3D-L38 series of 3D laser displacement sensors.

Refer to future VisionPro releases for details on acquiring images with the 3D-L38. Contact your Cognex sales representative for specific needs and questions regarding acquisition.
- This release supports the DLRuntime Tool, allowing you to import and host a VisionPro Deep Learning runtime workspace in your VisionPro application. A DLRuntime Tool allows your vision application access to all the images, vision tools and results supported by VisionPro Deep Learning software.

Note: This release supports Cognex VisionPro Deep Learning 3.3.2 to use the DLRuntime Tool. In addition, be aware the VisionPro installer does not install the DLRuntime Tool by default. You must explicitly install the DLRuntime Tool when you install this VisionPro release.

See the topic *Integrating a VPDL Runtime Workspace* in your VisionPro documentation for details on installing and using a DLRuntime Tool.
- This release adds several enhancements to acquiring images with the Cognex 3D-L68.

Refer to future VisionPro releases for details on the additional capabilities of the 3D-L68. Contact your Cognex sales representative for specific needs and questions regarding acquisition.
- This release removes the check on the software update maintenance period on all USB security keys.

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 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 Pro, Windows 10 IoT Enterprise, and Windows 11 Pro.

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

3D Hardware/Feature	Required 64-Bit OS
VisionPro with the 3D-L38, 3D-L68, 3D-L4000, DS1000 and DS900 series sensors	Windows 10 Pro and Windows 10 IoT Enterprise, Windows 11 Pro
VisionPro with the DSMax series sensors	Windows 10 Pro, Windows 11 Pro
3D-A5000 sensor with A5000 Viewer and 3D HandEye Field Calibrator	Windows 10 Pro, Windows 11 Pro
CAD Import Tool	Windows 10 Pro, Windows 11 Pro
Cognex 3DExpress	Windows 10 Pro, Windows 11 Pro

Supported Visual Studio Development Environments

VisionPro 9.22 SR1 supports application development and deployment using any version of Visual Studio that enables the targeting of projects to .NET Framework 4.8.

Note: Be aware that only versions of Visual Studio prior to and including VS2017 support adding VisionPro UI tool controls to Visual Studio Winform Designer.

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
- 3D-A5000 3D Sensor
- DS1000 Series 3D Sensors
- 3D-L4000 Series 3D Sensors (3D-L4050, 3D-L4100, 3D-L4300, 3D-L4033)
- DS900 Series 3D Sensors
- DSMax Series 3D Sensors
- MVS-851x series (Only MVS-8511, MVS-8511e, MVS-8514, MVS-8514e)
- CFG-8700 series
- USB 3.0 cameras by means of a GenTL consumer

Support for Cognex Designer and VisionPro Deep Learning

Refer to the following for information on using Cognex Designer and VisionPro Deep Learning with VisionPro 9.22 SR1:

Designer	VisionPro 9.22 SR1 supports Designer 4.4.3 - 4.5 VisionPro Deep Learning users must update to Designer 4.5
VisionPro Deep Learning (VPDL)	Using VisionPro 9.22 SR1 and VisionPro Deep Learning on the same system requires you install both: <ul style="list-style-type: none"> • VPDL 3.3.0 (earlier versions of VPDL are not compatible)

	<ul style="list-style-type: none"> The VisionPro 9.22 supplemental GPU installer, which you can find in the same location on MyCognex as the VisionPro 9.22 SR1 installer. <p>The VisionPro 9.22 supplemental GPU installer must be run after VisionPro has been installed to ensure correct operation of each product. Failure to run this installer can result in errors when executing VisionPro EL tools, VPDL tools, or both, depending on the order of execution of the tools.</p>
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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	
Any 3D operations ViDiEL tools	AVX2	Any AVX instruction sets prior to AVX2 are not sufficient for 3D operations.