

Accessories and Cables

Analog Accessories

IMAQ-A6804 – provides four BNC connectors, allowing three video signals and one trigger input for the PCI-1410 and PXI-1409.



IMAQ-A6822 – provides 22 BNC connectors to all video signals (VIDEO0, VIDEO1, VIDEO2, and VIDEO3), the external digital I/O lines and triggers, and external synchronization signals for the PCI-1410 and PXI-1409.

IMAQ-SCB-68 – camera connector block provides access to all of the signals on the PCI-1410 or PXI-1409 68-pin connector through this terminal block.

Parallel Digital Accessories

Digital Camera Cable Selection

Visit the National Instruments Camera Advisor at ni.com/camera for the latest information on cable selection for the NI 1424 and NI 1422 image acquisition devices.



IMAQ-D2504 – cable with four BNC connectors for digital triggers.

IMAQ SCB-100 – cable and terminal block for interfacing digital cameras to the NI 1424 or NI 1422 devices in cases where a dedicated cable is not available.

Digital Camera Extension Cables – extends your 100-pin SCSI digital camera cable by 2 or 4 m.

Camera Link Accessories



Camera Link Cable – NI Camera Link frame grabbers feature a small 26-pin connector compatible with all Camera Link video inputs, camera control outputs, and the serial interface.



IMAQ-D6804 – adapter cable that connects up to four triggers to an NI 1428.



Camera Link I/O Extension Board – expands the digital I/O on NI PCIe-1427, NI PCIe-1429, and NI PCIe-1430.

NI 825xR and CVS-145x Accessories

Basler Trigger Cable – female SMB to RJ45, used to trigger Basler A600 cameras.

SMB 200 – female SMB to female SMB cable, used to trigger certain Prosilica cameras.

SMB 110 – female SMB to male BNC cable, used to trigger certain Sony cameras.

Terminal Block and Prototyping Accessory – used to prototype and troubleshoot DIO for CVS-145x and NI 825xR. A demo mode can simulate triggers, encoder inputs, and product selection lines. Outputs are displayed with LEDs. (See Figure 2, page 429.)

Power Supply (24 V, 50 W) – with CVS-145x power connector; used also to power the isolated input of NI 825xR.

Ordering Information

Analog

IMAQ-A6804 (1 m)	187805-01
IMAQ-A6822 (1 m)	778135-01
IMAQ-SCB-68	778410-01

Digital

IMAQ SCB-100	777915-01
IMAQ-D2504-1 (1 m)	185298-01
Digital camera extension cables	
2 m	184743-02
4 m	184743-04

Camera Link

Camera Link I/O Extension Board	779352-01
Camera Link cable (2 m)	187676-02
IMAQ-D6804 (1 m)	187804-01

IEEE 1394 Cameras and Accessories

Camera, 640x480, 60 fps.....	778785-01
Camera, 1024x768, 30 fps.....	778849-01
12 mm machine vision lens	778789-01
IEEE 1394a cable (2 m)	185797-02
IEEE 1394b cable (4m).....	196283-04
IEEE 1394a to IEEE 1394b cable (4m)	196284-04
Basler trigger cable	190264-01
SMB 200 (0.3 m).....	763390-01
SMB 110 (1 m)	763405-01
Advanced Illumination LED ring light	778787-01

NI 8252, NI 825xR, and CVS-145x Accessories

Terminal block and prototyping accessory	779166-01
Digital I/O terminal block and cable	
Horizontal mount	778790-01
Vertical mount	778791-01
Panel and DIN-rail mounting kit	189154-01
Power supply (24 V, 50 W).....	778794-01

For RTSI bus cable ordering information, see page 179.

BUY NOW!

For complete product specifications, pricing, and accessory information, call 866 265 9891 (U.S. only) or go to ni.com/vision.

Cameras, Lenses, Lights, and Consulting Assistance

Complete Vision Component Providers

Several companies are experts in machine vision and image processing. They specialize in accurately specifying and selling all of the components necessary to complete even the most challenging vision applications.

Worldwide

Edmund Industrial Optics

From UV windows to fully integrated electronic imaging systems, Edmund Optics is a single source for optical products and services. Edmund Optics offers more than your average vision component catalog. It augments its broad selection and deep inventories with express shipping options, OEM quantity discounts, and the ability to provide custom design and manufacturing services.

www.edmundoptics.com

North America

GraTek Imaging

GraTek provides all components of a machine vision system, including lighting optimized to an application, quality optical components, high-resolution and high-speed cameras, image acquisition hardware, and image analysis software for Windows or real-time OSs. www.graftek.com

France

Alliance Vision

Alliance Vision is one of the leading imaging product providers in France for machine vision and image analysis. www.alliancevision.com

Central Europe

Qualimatest

Qualimatest is a supplier of material solutions for industrial vision, which supplements its product range with those of other suppliers in order to offer customers the full range of components necessary for the realization of their systems. www.qmt.ch

Polytec

With more than 10 years of experience in machine vision, Polytec has grown to one of the major suppliers for components and instruments in Europe. Today Polytec offers the full range of machine vision hardware – illumination, lenses, cameras, frame grabbers, compact vision systems, and more. These products fit perfectly with the National Instruments program, so you can easily build up your vision system. www.polytec.de/bv

Camera Compatibility – Camera Advisor

Engineers and scientists now have a one-stop Web resource for selecting a machine vision scientific imaging camera. With the National Instruments Camera Advisor, located at ni.com/camera, you can compare camera features and specifications for hundreds of cameras.



Lighting Options

Selecting the proper lighting technique can simplify your application development. The goal of lighting is to separate the feature or part you want to inspect from the surrounding background by as many gray levels or color grades as possible. Here are a few guidelines for selecting a lighting technique.

Requirement	Object Surface Characteristics	Suggested Lighting
Reduce reflections	Shiny object	Diffuse illuminator, polarized ring light cloudy day illuminator
Even illumination	Any object	Fluorescent, ring light, diffuse illuminator
Reduce shadows	Object with protrusions, 3D object	Ring light
Silhouetting	Any object	Backlight

National Instruments Vision System Integrators

The National Instruments Alliance Partner program works with more than 600 companies who offer turnkey solutions and services. The following companies specialize in providing machine vision consulting and integration with NI vision products. For a complete list, visit ni.com/vision.

North America

Averna Technologies – www.averna.com/vision
 EPIC Vision Solutions – www.epicvisionsolutions.com
 PrimeTest – www.primetest.com
 Wineman Technology Inc. – www.winemantech.com
 G2 Test & Measurement – www.g2test.com

Europe

Qualimatest – www.qmt.ch
 Consulting Team Machine Vision – www.ctmv.de
 ImagingLab – www.imaginglab.it

Asia

Neo Vista System Integrators – www.nvsi.com.au
 Soliton Automation – www.solitonautomation.com