

Attributes by Name

The following table, sorted by attribute name, describes the attributes you can use with the attribute functions.

Attribute Name	Attribute	Type	Description
IMAQdxAttributeBaseAddress	CameraInformation::BaseAddress	U32	Read only. Gets the base address of the camera registers.
IMAQdxAttributeBusType	CameraInformation::BusType	Enum	Read only. Gets the bus type of the camera.
IMAQdxAttributeModelName	CameraInformation::ModelName	String	Read only. Returns the model name.
IMAQdxAttributeSerialNumberHigh	CameraInformation::SerialNumberHigh	U32	Read only. Gets the upper 32-bits of the camera 64-bit serial number.
IMAQdxAttributeSerialNumberLow	CameraInformation::SerialNumberLow	U32	Read only. Gets the lower 32-bits of the camera 64-bit serial number.
IMAQdxAttributeVendorName	CameraInformation::VendorName	String	Read only. Returns the vendor name.
IMAQdxAttributeHostIPAddress	CameraInformation::HostIPAddress	String	Read only. Returns the host adapter IP address.
IMAQdxAttributeIPAddress	CameraInformation::IPAddress	String	Read only. Returns the IP address.
IMAQdxAttributePrimaryURLString	CameraInformation::PrimaryURLString	String	Read only. Gets the camera's primary URL string.
IMAQdxAttributeSecondaryURLString	CameraInformation::SecondaryURLString	String	Read only. Gets the camera's secondary URL string.
IMAQdxAttributeAcqInProgress	StatusInformation::AcqInProgress	Bool	Read only. Gets the current state of the acquisition. TRUE if acquiring; otherwise FALSE.
IMAQdxAttributeLastBufferCount	StatusInformation::LastBufferCount	U32	Read only. Gets the number of transferred buffers.
IMAQdxAttributeLastBufferNumber	StatusInformation::LastBufferNumber	U32	Read only. Gets the last cumulative buffer number transferred.
IMAQdxAttributeLostBufferCount	StatusInformation::LostBufferCount	U32	Read only. Gets the number of lost buffers during an acquisition session.
IMAQdxAttributeLostPacketCount	StatusInformation::LostPacketCount	U32	Read only. Gets the number of lost packets during an acquisition

			session.
IMAQdxAttributeRequestedResendPackets	StatusInformation::RequestedResendPacketCount	U32	Read only. Gets the number of packets requested to be resent during an acquisition session.
IMAQdxAttributeReceivedResendPackets	StatusInformation::ReceivedResendPackets	U32	Read only. Gets the number of packets that were requested to be resent during an acquisition session and were completed.
IMAQdxAttributeBayerGainB	AcquisitionAttributes::Bayer::GainB	F64	Sets/gets the white balance gain for the blue component of the Bayer conversion.
IMAQdxAttributeBayerGainG	AcquisitionAttributes::Bayer::GainG	F64	Sets/gets the white balance gain for the green component of the Bayer conversion.
IMAQdxAttributeBayerGainR	AcquisitionAttributes::Bayer::GainR	F64	Sets/gets the white balance gain for the red component of the Bayer conversion.
IMAQdxAttributeBayerPattern	AcquisitionAttributes::Bayer::Pattern	Enum	Sets/gets the Bayer pattern to use.
IMAQdxAttributeStreamChannelMode	AcquisitionAttributes::Controller::StreamChannelMode	Enum	Gets/sets the mode for allocating a FireWire stream channel.
IMAQdxAttributeDesiredStreamChannel	AcquisitionAttributes::Controller::DesiredStreamChannel	U32	Gets/sets the stream channel to manually allocate.
IMAQdxAttributeFrameInterval	AcquisitionAttributes::FrameInterval	U32	Read only. Gets the duration in milliseconds between successive frames.
IMAQdxAttributeIgnoreFirstFrame	AcquisitionAttributes::IgnoreFirstFrame	Bool	Gets/sets the video delay of one frame between starting the camera and receiving the video feed.
IMAQdxAttributeOffsetX	OffsetX	U32	Gets/sets the left offset of the image.
IMAQdxAttributeOffsetY	OffsetY	U32	Gets/sets the top offset of the image.
IMAQdxAttributeWidth	Width	U32	Gets/sets the width of the image.
IMAQdxAttributeHeight	Height	U32	Gets/sets the height of the image.
IMAQdxAttributePixelFormat	PixelFormat	U32	Gets/sets the pixel format of the source sensor.
IMAQdxAttributePacketSize	PacketSize	U32	Gets/sets the packet size in

			bytes.
IMAQdxAttributePayloadSize	PayloadSize	U32	Gets/sets the frame size in bytes.
IMAQdxAttributeSpeed	AcquisitionAttributes::Speed	Enum	Gets/sets the transfer speed in Mbps for a FireWire packet.
IMAQdxAttributeShiftPixelBits	AcquisitionAttributes::ShiftPixelBits	Bool	Gets/sets the alignment of 16-bit cameras. Downshift the pixel bits if the camera returns most significant bit-aligned data.
IMAQdxAttributeSwapPixelBytes	AcquisitionAttributes::SwapPixelBytes	Bool	Gets/sets the endianness of 16-bit cameras. Swap the pixel bytes if the camera returns little endian data.
IMAQdxAttributeOverwriteMode	AcquisitionAttributes::OverwriteMode	Enum	Gets/sets the overwrite mode, used to determine acquisition when an image transfer cannot be completed due to an overwritten internal buffer.
IMAQdxAttributeTimeout	AcquisitionAttributes::Timeout	U32	Gets/sets the timeout value in milliseconds, used to abort an acquisition when the image transfer cannot be completed within the delay.
IMAQdxAttributeVideoMode	AcquisitionAttributes::VideoMode	U32	Gets/sets the video mode for a camera.
IMAQdxAttributeBitsPerPixel	AcquisitionAttributes::BitsPerPixel	Enum	Gets/sets the actual bits per pixel. For 16-bit components, this represents the actual bit depth (10-, 12-, 14-, or 16-bit).
IMAQdxAttributeReserveDualPackets	AcquisitionAttributes::ReserveDualPackets	Bool	Gets/sets if dual packets will be reserved for a very large FireWire packet.
IMAQdxAttributeReceiveTimestampMode	AcquisitionAttributes::ReceiveTimestampMode	Enum	Gets/sets the mode for timestamping images received by the driver.
IMAQdxAttributeActualPeakBandwidth	AcquisitionAttributes::AdvancedEthernet::BandwidthControl::ActualPeakBandwidth	F64	Read only. Returns the actual maximum peak bandwidth the camera will be configured to use.
IMAQdxAttributeDesiredPeakBandwidth	AcquisitionAttributes::AdvancedEthernet::BandwidthControl::DesiredPeakBandwidth	F64	Gets/sets the desired maximum peak bandwidth the camera should use.
IMAQdxAttributeDestinationMode	AcquisitionAttributes::AdvancedEthernet::Controller::DestinationMode	Enum	Gets/Sets where the camera is instructed to send the image stream.

IMAQdxAttributeDestinationMulticastAddress	AcquisitionAttributes::AdvancedEthernet::Controller::DestinationMulticastAddress	String	Gets/Sets the multicast address the camera should send data in multicast mode.
IMAQdxAttributeLostPacketMode	AcquisitionAttributes::AdvancedEthernet::LostPacketMode	Enum	Gets/sets the behavior when the user extracts a buffer that has missing packets.
IMAQdxAttributeMemoryWindowSize	AcquisitionAttributes::AdvancedEthernet::ResendParameters::MemoryWindowSize	U32	Gets/sets the size of the memory window of the camera in kilobytes. Should match the camera's internal buffer size.
IMAQdxAttributeResendsEnabled	AcquisitionAttributes::AdvancedEthernet::ResendParameters::ResendsEnabled	Bool	Gets/sets if resends will be issued for missing packets.
IMAQdxAttributeResendThresholdPercentage	AcquisitionAttributes::AdvancedEthernet::ResendParameters::ResendThresholdPercentage	U32	Gets/sets the threshold of the packet processing window that will trigger packets to be resent.
IMAQdxAttributeResendBatchingPercentage	AcquisitionAttributes::AdvancedEthernet::ResendParameters::ResendBatchingPercentage	U32	Gets/sets the percent of the packet resend threshold that will be issued as one group past the initial threshold sent in a single request.
IMAQdxAttributeMaxResendsPerPacket	AcquisitionAttributes::AdvancedEthernet::ResendParameters::MaxResendsPerPacket	U32	Gets/sets the maximum number of resend requests that will be issued for a missing packet.
IMAQdxAttributeResendResponseTimeout	AcquisitionAttributes::AdvancedEthernet::ResendParameters::ResendResponseTimeout	U32	Gets/sets the time to wait for a resend request to be satisfied before sending another.
IMAQdxAttributeNewPacketTimeout	AcquisitionAttributes::AdvancedEthernet::ResendParameters::NewPacketTimeout	U32	Gets/sets the time to wait for new packets to arrive in a partially completed image before assuming the rest of the image was lost.
IMAQdxAttributeMissingPacketTimeout	AcquisitionAttributes::AdvancedEthernet::ResendParameters::MissingPacketTimeout	U32	Gets/sets the time to wait for a missing packet before issuing a resend.
IMAQdxAttributeResendTimerResolution	AcquisitionAttributes::AdvancedEthernet::ResendParameters::ResendTimerResolution	U32	Gets/sets the resolution of the packet processing system that is used for all packet-related timeouts.