SVS-VISTEK

Featureset Reference Manual

SVCam-GigE Series

Digital Cameralink Cameras

Version 1.1.0 Date 2020/04/14

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Device Control

Device control features provides general information and control for the device (camera) and its sensor. This is mainly used to identify the device during the enumeration process and to obtain information about the sensor resolution. Other information and controls pertaining to the general state of the device are also included in this category.

Feature

Manufacturer Name

Type: String

GenICam Name: ManufacturerName

String containing the self-describing name of the manufacturer

Direct Register Access

AccessMode	Address	Length
Read Only	0x0004	64

Feature

Model Name

Type: String

GenICam Name: ModelName

String containing the self-describing name of the device model

Direct Register Access

AccessMode	Address	Length
Read Only	0x0044	64

Feature

Manufacturer Info

Type: String

GenICam Name: ManufacturerInfo

String containing additional manufacturer information

Direct Register Access

AccessMode	Address	Length
Read Only	0x0104	64

Feature

Device Version

Type: String

GenICam Name: DeviceVersion

Direct Register Access

AccessMode	Address	Length
Read Only	0x00C4	32

Feature

Serial Number

Type: String

GenICam Name: SerialNumber

String containing the serial number of the device

Direct Register Access

AccessMode	Address	Length
Read Only	0x0144	64

Feature

User Defined Name

Type: String

GenICam Name: UserDefinedName

String containing the user defined name of the device

Direct Register Access

AccessMode	Address	Length
Read/Write	0x0184	64

Feature

Device Scan Type

Type: Enumeration

GenICam Name: DeviceScanType

Enumeration Entities

Name	GenICam Name	Register Value
Area Scan	*Areascan*	0

Feature

Device Temperature Selector

Type: Enumeration

GenICam Name: DeviceTemperatureSelector

Selects the location within the device, where the temperature will be measured.

Enumeration Entities

Name	GenICam Name	Register Value
Mainboard	*Mainboard*	0

Description: *This enumeration value selects the temperature measured on the mainboard.*

Feature

Device Temperature

Type: Float

GenICam Name: DeviceTemperature

Device temperature in degrees Celsius (C). It is measured at the location selected by DeviceTemperatureSelector.

Direct Register Access

AccessMode	Address
Read Only	0xB25C

Feature

Device Reset

Type: Command

GenICam Name: DeviceReset

Resets the device to its power up state.

Direct Register Access

AccessMode	Address
Write Only	0xB0E8

Image Format Control

This category includes items that control the size of the acquired image and the format of the transferred pixel data

Feature

Sensor Width

Type: Integer

GenICam Name: SensorWidth

This is a read only element. It is an integer that indicates the actual width of the camera's sensor in pixels.

Direct Register Access

AccessMode	Address
Read Only	0xB0A4

Feature

Sensor Height

Type: Integer

GenICam Name: SensorHeight

This is a read only element. It is an integer that indicates the actual width of the camera's sensor in pixels.

Direct Register Access

AccessMode	Address
Read Only	0xB0A8

Feature

X Offset

Type: Integer

GenICam Name: OffsetX

This value sets the left offset for the area of interest in pixels, i.e., the distance in pixels between the left side of the sensor and the left side of the image.

Direct Register Access

AccessMode	Address
Read/Write	0xB050

Feature

Y Offset

Type: Integer

GenICam Name: OffsetY

This value sets the top offset for the area of interest, i.e., the distance in pixels between the top of the sensor and the top of the image,

Direct Register Access

AccessMode	Address
Read/Write	0xB054

Feature

Width

Type: Integer

GenICam Name: Width

This value sets the width of the area of interest in pixels.

Direct Register Access

AccessMode	Address
Read/Write	0xB058

Feature

Height

Type: Integer

GenICam Name: Height

This value sets the height of the area of interest in pixels.

Direct Register Access

AccessMode	Address
Read/Write	0xB05C

Feature

Max Width

Type: Integer

GenICam Name: WidthMax

This is a read only element. It is an integer that indicates maximum allowed width of the image in pixels taking into account any function that may limit the allowed width.

Direct Register Access

AccessMode	Address
Read Only	0xB060

Feature

Max Height

Type: Integer

GenICam Name: HeightMax

This is a read only element. It is an integer that indicates maximum allowed height of the image in pixels taking into account any function that may limit the allowed height.

Direct Register Access

AccessMode	Address
Read Only	0xB064

Feature

Pixel Size

Type: Enumeration

GenICam Name: PixelSize

Available pixelsize settings

Enumeration Entities

Name	GenICam Name	Register Value
Bpp8	*Bpp8*	0
Bpp12	*Bpp12*	2
Bpp16	*Bpp16*	3

Direct Register Access

AccessMode	Address
Read Only	0xB094

Feature

Pixel Color Filter

Type: Enumeration

GenICam Name: PixelColorFilter

This is a read only feature. This enumeration provides a list of values that indicate the alignment of the camera's Bayer filter to the pixels in the acquired images.

Enumeration Entities

Name	GenICam Name	Register Value

Enumeration Entities

Name	GenICam Name	Register Value
None	*None*	0
BayerRG	*BayerRG*	1
BayerGR	*BayerGR*	2
BayerGB	*BayerGB*	3
BayerBG	*BayerBG*	4

Direct Register Access

AccessMode	Address
Read Only	0xB0CC

Feature

Binning Horizontal

Type: Enumeration

GenICam Name: BinningHorizontal

This enumeration controls the horizontal binning setting

Enumeration Entities

Name	GenICam Name	Register Value
Off	*Off*	0
On	*On*	1

Direct Register Access

AccessMode	Address
Read/Write	0xB004

Feature

Binning Vertical

Type: Enumeration

GenICam Name: BinningVertical

This enumeration controls the horizontal binning setting

Enumeration Entities

Name	GenICam Name	Register Value
Off	*Off*	0
On	*On*	1

Direct Register Access

AccessMode	Address
Read/Write	0xB004

Feature

ReverseX

Type: Boolean

GenICam Name: ReverseX

Flip horizontally the image sent by the device. The Region of interest is applied after the flipping.

Direct Register Access

AccessMode	Address
Read/Write	0xB338

Feature

ReverseY

Type: Boolean

GenICam Name: ReverseY

Flip vertically the image sent by the device. The Region of interest is applied after the flipping.

Direct Register Access

AccessMode	Address
Read/Write	0xB338

Acquisition Control

This category includes items used to set the image acquisition parameters and to start and stop acquisition

Feature

Acquisition Mode

Type: Enumeration

GenICam Name: AcquisitionMode

This enumeration sets the image acquisition mode.

Enumeration Entities

Name	GenICam Name	Register Value
Single Frame	*SingleFrame*	0
Description:	*This enumeration value sets the camera's acquisition mode to single frame*	
Multi Frame	*MultiFrame*	1
Description:	*This enumeration value sets the camera's acquisition mode to multi frame.*	
Continuous	*Continuous*	2
Description:	*This enumeration value sets the camera's acquisition mode to continuous.*	

Direct Register Access

AccessMode	Address
Read/Write	0xB2AC

Feature

Acquisition Start

Type: Command

GenICam Name: AcquisitionStart

This command starts the acquisition of images. If the camera is set for single frame acquisition, it will start acquisition of one frame. If the camera is set for continuous frame acquisition, it will start continuous acquisition of frames.

Direct Register Access

AccessMode	Address
Write Only	0xB038

Feature

Acquisition Stop

Type: Command

GenICam Name: AcquisitionStop

If the camera is set for continuous image acquisition and acquisition has been started, this command stops the acquisition of images.

Direct Register Access

AccessMode	Address
Write Only	0xB038

Feature

Trigger Selector

Type: Enumeration

GenICam Name: TriggerSelector

This enumeration lists the types of trigger that are available for selection. Once a trigger type has been selected, all the other trigger features will be applied to the selected trigger.

Enumeration Entities

Name	GenICam Name	Register Value
Acquisition Start	*AcquisitionStart*	0
Description:	*This enumeration value selects the acquisition start trigger.*	
Frame Start	*FrameStart*	1
Description:	*This enumeration value selects the frame start trigger.*	

Direct Register Access

AccessMode	Address
Read/Write	0xB238

Feature

Trigger Mode

Type: Enumeration

GenICam Name: TriggerMode

This enumeration provides a list of the values available for setting the trigger mode for the selected trigger.

Enumeration Entities

Name	GenICam Name	Register Value
Off	*Off*	0
Description:	*This enumeration value sets the mode for the selected trigger to off.*	
On	*On*	1
Description:	*This enumeration value sets the mode for the selected trigger to on.*	

Direct Register Access

AccessMode	Address
Read/Write	0xB23C

Feature

Generate Software Trigger

Type: Command

GenICam Name: TriggerSoftware

This command generates a software trigger signal. The software trigger signal will be used if the trigger source is set to 'software'.

Direct Register Access

AccessMode	Address
Write Only	0xB248

Feature

Trigger Source

Type: Enumeration

GenICam Name: TriggerSource

This enumeration lists the available trigger sources for the selected trigger.

Enumeration Entities

Name	GenICam Name	Register Value
Trigger Software	*Software*	0
Description:	*This enumeration value sets the source for the selected trigger to software trigger.*	
Hardware Trigger IO-MUX	*Line1*	1
Description:	*This enumeration value sets the source for the selected trigger to line 1.*	

Direct Register Access

AccessMode	Address
Read/Write	0xB240

Feature

Trigger Activation

Type: Enumeration

GenICam Name: TriggerActivation

This enumeration lists the trigger activation types available for the selected trigger.

Enumeration Entities

Name	GenICam Name	Register Value
Rising Edge	*RisingEdge*	0
Description:	*This enumeration value sets the trigger to be valid when the trigger signal is going high.*	
Falling Edge	*FallingEdge*	1
Description:	*This enumeration value sets the trigger to be valid when the trigger signal is going low.*	

Direct Register Access

AccessMode	Address
Read/Write	0xB244

Feature

Trigger Delay

Type: Float

GenICam Name: TriggerDelay

Trigger Delay specifies the absolute delay in microseconds (us) to apply the trigger reception before effectively activating it.

Direct Register Access

AccessMode	Address
Read/Write	0xB24C

Feature

Acquisition FrameCount

Type: Integer

GenICam Name: AcquisitionFrameCount

This value sets the number of frames acquired in the multiframe acquisition mode

Direct Register Access

AccessMode	Address
Read/Write	0xB2F8

Feature

Exposure Mode

Type: Enumeration

GenICam Name: ExposureMode

This enumeration lists the available exposure modes.

Enumeration Entities

Name	GenICam Name	Register Value
Timed	*Timed*	0
Description:	*This enumeration value sets the exposure mode to timed.*	
Trigger Width	*TriggerWidth*	1
Description:	*This enumeration value sets the exposure mode to trigger width.*	

Direct Register Access

AccessMode	Address
Read/Write	0xB254

Feature

Acquisition Framerate

Type: Float

GenICam Name: AcquisitionFrameRate

This float value sets the camera's acquisition framerate in Hz.

Direct Register Access

AccessMode	Address	FormulaFrom	FormulaTo
Read/Write	0xB030	TO / 1000	FROM * 1000

Feature

Exposure Time

Type: Float

GenICam Name: ExposureTime

This float value sets the camera's exposure time in microseconds.

Direct Register Access

AccessMode	Address
Read/Write	0xB02C

Feature

Readout Control

Type: Enumeration

GenICam Name: ReadoutControl

Enumeration Entities

Name	GenICam Name	Register Value
disable	*disable*	0
wait	*wait*	1
delayed readout	*delay*	2

Direct Register Access

AccessMode	Address
Read/Write	0xB0F4

Feature

Readout Control trigger next frame

Type: Command

GenICam Name: ReadoutControlNext

Direct Register Access

AccessMode	Address
Write Only	0xB0F0

Feature

Readout Delay

Type: Integer

GenICam Name: ReadoutDelay

Direct Register Access

AccessMode	Address
Read/Write	0xB0EC

Feature

Exposure Auto

Type: Enumeration

GenICam Name: ExposureAuto

Sets the automatic exposure mode when ExposureMode is Timed. The exact algorithm used to implement this control is device-specific.

Enumeration Entities

Name	GenICam Name	Register Value
Off	*Off*	0
Description:	*Exposure duration is user controlled using ExposureTime.*	
Once	*Once*	2
Description:	*Exposure duration is adapted once by the device. Once it has converged, it returns to the Off state.*	
Continuous	*Continuous*	1
Description:	*Exposure duration is constantly adapted by the device to maximize the dynamic range.*	

Direct Register Access

AccessMode	Address
Read/Write	0xA624

Feature

Exposure First

Type: Boolean

GenICam Name: ExposureAutoOrder

This value sets the priority of both exposure and gain settings. True means exposure before gain.

Direct Register Access

AccessMode	Address
Read/Write	0xA628

Feature

Shutter Mode

Type: Enumeration

GenICam Name: ShutterMode

This enumeration sets the shutter mode.

Enumeration Entities

Name	GenICam Name	Register Value
Global Shutter	*GlobalShutter*	0
Description:	*This enumeration value sets the camera's shutter mode to global shutter*	
Rolling Shutter	*RollingShutter*	1
Description:	*This enumeration value sets the camera's shutter mode to rolling shutter.*	

Direct Register Access

AccessMode	Address
Read/Write	0xB33C

Analog Control

This category includes items that control the analog characteristics of the video signal

Feature

Gain Selector

Type: Enumeration

GenICam Name: GainSelector

This enumeration selects the gain control to configure. Once a gain control has been selected, all changes to the gain settings will be applied to the selected control.

Enumeration Entities

Name	GenICam Name	Register Value
All	*All*	0

Description: *This enumeration value selects all available gain controls for adjustment.*

Feature

Gain (dB)

Type: Float

GenICam Name: Gain

Sets the dB value of the selected gain control.

Direct Register Access

AccessMode	Address	FormulaFrom	FormulaTo
Read/Write	0xB048	TO/1000	FROM*1000

Feature

Black Level Selector

Type: Enumeration

GenICam Name: BlackLevelSelector

This enumeration selects the black level control to configure. Once a black level control has been selected, all changes to the black level settings will be applied to the selected control.

Enumeration Entities

Name	GenICam Name	Register Value
All	*All*	0

Description: *This enumeration value selects all available black level controls for adjustment.*

Feature

Offset (Raw)

Type: Integer

GenICam Name: BlackLevelRaw

This value sets the selected black level control as an integer.

Direct Register Access

AccessMode	Address
Read/Write	0xB04C

Feature

Gain Auto

Type: Enumeration

GenICam Name: GainAuto

Sets the automatic gain control (AGC) mode. The exact algorithm used to implement AGC is device-specific.

Enumeration Entities

Name	GenICam Name	Register Value
Off	*Off*	0
Description:	*Gain is User controlled using Gain.*	
Once	*Once*	2
Description:	*Gain is automatically adjusted once by the device. Once it has converged, it automatically returns to the Off state.*	
Continuous	*Continuous*	1
Description:	*Gain is constantly adjusted by the device.*	

Direct Register Access

AccessMode	Address
Read/Write	0xA600

Feature

Autogain Level

Type: Integer

GenICam Name: GainAutoLevel

Direct Register Access

AccessMode	Address
Read/Write	0xA604

Feature

Balance Ratio Selector

Type: Enumeration

GenICam Name: BalanceRatioSelector

This enumeration selects a balance ratio control to configuration. Once a balance ratio control has been selected, all changes to the balance ratio settings will be applied to the selected control.

Enumeration Entities

Name	GenICam Name	Register Value
Red	*Red*	0
Description:	*This enumeration value selects the red balance ratio control for adjustment.*	
Green	*Green*	1
Description:	*This enumeration value selects the green balance ratio control for adjustment.*	
Blue	*Blue*	2
Description:	*This enumeration value selects the blue balance ratio control for adjustment.*	

Feature

Balance Ratio

Type: Float

GenICam Name: BalanceRatio

Controls ratio of the selected color component to a reference color component. It is used for white balancing.

Direct Register Access

AccessMode	Address	FormulaFrom	FormulaTo
Read/Write	Formula	TO / 256	FROM * 256

Feature

Gain Auto Balance

Type: Enumeration

GenICam Name: GainAutoBalance

Sets the mode for automatic gain balancing between the aps. The gain coefficients of each channel or tap are adjusted so they are matched.

Enumeration Entities

Name	GenICam Name	Register Value
Off	*Off*	0
Description:	*Gain tap balancing is user controlled using Gain.*	
Once	*Once*	1
Description:	*Gain tap balancing is automatically adjusted once by the device. Once it has converged, it automatically returns to the Off state.*	
Continuous	*Continuous*	2
Description:	*Gain tap balancing is constantly adjusted by the device.*	
Reset	*Reset*	3
Description:	*Gain tap balancing is resetted.*	

Direct Register Access

AccessMode	Address
Read/Write	0xB0D0

Strobe Control

This category includes items used to set the parameters for the integrated strobe controller

Feature

Strobe Selector

Type: Enumeration

GenICam Name: StrobeSelector

Enumeration Entities

Name	GenICam Name	Register Value
Strobe 0	*Strobe0*	0
Strobe 1	*Strobe1*	1
Strobe 2	*Strobe2*	2
Strobe 3	*Strobe3*	3

Feature

Strobe Polarity

Type: Enumeration

GenICam Name: StrobePolarity

This Enumeration sets the camera's strobe polarity.

Enumeration Entities

Name	GenICam Name	Register Value
positive	*positive*	0
negative	*negative*	1

Direct Register Access

AccessMode	Address
Read/Write	Formula

Feature

Strobe Duration

Type: Float

GenICam Name: StrobeDuration

This float value sets the camera's strobe duration in microseconds.

Direct Register Access

AccessMode	Address
Read/Write	Formula

Feature

Strobe Delay

Type: Float

GenICam Name: StrobeDelay

This float value sets the camera's strobe delay in microseconds.

Direct Register Access

AccessMode	Address
Read/Write	Formula

Enhanced IO

This category includes items used to control the integrated PWM Controller

Feature

PWMEnable

Type: Boolean

GenICam Name: PWMEnable

Direct Register Access

AccessMode	Address
Read/Write	0xA7E4

Feature

PWMMax

Type: Integer

GenICam Name: PWMMax

Direct Register Access

AccessMode	Address
Read/Write	0xA7E8

Feature

PWMChange0

Type: Integer

GenICam Name: PWMChange0

Direct Register Access

AccessMode	Address
Read/Write	0xA7EC

Feature

PWMChange1

Type: Integer

GenICam Name: PWMChange1

Direct Register Access

AccessMode	Address
Read/Write	0xA7F0

Feature

PWMChange2

Type: Integer

GenICam Name: PWMChange2

Direct Register Access

AccessMode	Address
Read/Write	0xA7C4

Feature

PWMChange3

Type: Integer

GenICam Name: PWMChange3

Direct Register Access

AccessMode	Address
Read/Write	0xA7C8

Feature

SeqTrigger

Type: Command

GenICam Name: SeqTrigger

Direct Register Access

AccessMode	Address
Write Only	0xA7BC

Feature

SeqTriggermode

Type: Enumeration

GenICam Name: SeqTriggermode

Enumeration Entities

Name	GenICam Name	Register Value
Trigger on high level	*LevelHigh*	0
Trigger on rising edge	*RisingEdge*	1

Direct Register Access

AccessMode	Address
Read/Write	0xA7D4

Feature

SeqSelector

Type: Integer

GenICam Name: SeqSelector

Direct Register Access

AccessMode	Address
Read/Write	0xA7D0

Feature

SeqCount

Type: Integer

GenICam Name: SeqCount

Direct Register Access

AccessMode	Address
Read/Write	0xA7CC

Feature

SeqEnable

Type: Boolean

GenICam Name: SeqEnable

Direct Register Access

AccessMode	Address
Read/Write	0xA7D4

Feature

SeqLoop

Type: Boolean

GenICam Name: SeqLoop

Direct Register Access

AccessMode	Address
Read/Write	0xA7C0

Feature

DebounceDuration Type: Integer

GenICam Name: DebounceDuration

Direct Register Access

AccessMode	Address
Read/Write	0xA7A8

Feature

PrescaleDivisor Type: Integer

GenICam Name: PrescaleDivisor

Direct Register Access

AccessMode	Address
Read/Write	0xA7AC

Feature

SeqInterval Type: Integer

GenICam Name: SeqInterval

Direct Register Access

AccessMode	Address
Read/Write	0xA7DC

Feature

SeqPulseAStart Type: Integer

GenICam Name: SeqPulseAStart

Direct Register Access

AccessMode	Address
Read/Write	0xA7D8

Feature

SeqPulseAStop Type: Integer

GenICam Name: SeqPulseAStop

Direct Register Access

AccessMode	Address
Read/Write	0xA7B0

Feature

SeqPulseBStart Type: Integer

GenICam Name: SeqPulseBStart

Direct Register Access

AccessMode	Address
Read/Write	0xA7B4

Feature

SeqPulseBStop Type: Integer

GenICam Name: SeqPulseBStop

Direct Register Access

AccessMode	Address
Read/Write	0xA7B8

Transport Layer Control

The transport layer category includes items related to the CamLink Vision transport layer

Feature

DeviceTapGeometry

Type: Enumeration

GenICam Name: DeviceTapGeometry

This device tap geometry feature describes the geometrical properties characterizing the taps of a camera as presented at the output of the device.

Enumeration Entities

Name	GenICam Name	Register Value
Geometry_1X_1Y	*Geometry_1X_1Y*	0
Geometry_2XE_1Y	*Geometry_2XE_1Y*	1
Geometry_1X_2YE	*Geometry_1X_2YE*	2
Geometry_2XE_2YE	*Geometry_2XE_2YE*	3
Geometry_2X_1Y	*Geometry_2X_1Y*	4
Geometry_1X2_1Y	*Geometry_1X2_1Y*	5
Geometry_1X8_1Y	*Geometry_1X8_1Y*	6

Direct Register Access

AccessMode	Address
Read/Write	0xB0AC

LUT Control

Category that includes the LUT control features.

Feature

LUT Selector

Type: Enumeration

GenICam Name: LUTSelector

Selects which LUT to control.

Enumeration Entities

Name	GenICam Name	Register Value
Luminance	*Luminance*	0

Description: *Selects the Luminace LUT.*

Feature

LUT Enable

Type: Boolean

GenICam Name: LUTEnable

This boolean value enables the selected LUT.

Direct Register Access

AccessMode	Address
Read/Write	0xB0B4

Feature

LUT Index

Type: Integer

GenICam Name: LUTIndex

Control the index (offset) of the coefficient to access in the selected LUT.

Feature

LUT Value

Type: Integer

GenICam Name: LUTValue

Returns the Value at entry LUTIndex of the LUT selected by LUTSelector.

Direct Register Access

AccessMode	Address
Read/Write	0x80000

User Set Control

User Sets provides the features used to save camera settings to on-board non-volatile memory.

Feature

UserSetSelector

Type: Enumeration

GenICam Name: UserSetSelector

Enumeration Entities

Name	GenICam Name	Register Value
Default User Set	*Default*	0
User Set 1	*UserSet1*	1

Direct Register Access

AccessMode	Address
Read/Write	0xBF00

Feature

UserSetLoad

Type: Command

GenICam Name: UserSetLoad

Direct Register Access

AccessMode	Address
Write Only	0xBF04

Feature

UserSetSave

Type: Command

GenICam Name: UserSetSave

Direct Register Access

AccessMode	Address
Write Only	0xBF04

Customer ID Protection

This category includes items used for licensing.

Feature

Customer ID

Type: Integer

GenICam Name: CustomerID

This integer value includes the customer id set by manufacturer.

Direct Register Access

AccessMode	Address
Read/Write	0xA524

Feature

Customer Value

Type: Integer

GenICam Name: CustomerValue

This integer value includes the customer value set by customer.

Direct Register Access

AccessMode	Address
Read/Write	0xA52C

Feature

Customer Value Key

Type: Integer

GenICam Name: CustomerValueKey

This integer value includes the key for setting the customer value by customer.

Direct Register Access

AccessMode	Address
Read/Write	0xA528

Digital IO Control

This category includes items used to control the operation of the camera's digital I/O lines

Feature

LineSelector

Type: Enumeration

GenICam Name: LineSelector

Enumeration Entities

Name	GenICam Name	Register Value
Output 0 - Line0	*Line0*	0
Output 1 - Line1	*Line1*	1
Output 2 - Line2	*Line2*	2
Output 3 - Line3	*Line3*	3
Output 4 - Line4	*Line4*	4
Uart In - Line5	*Line5*	5
Trigger - Line6	*Line6*	6
Sequenzer - Line7	*Line7*	7
Debouncer - Line8	*Line8*	8
Prescaler - Line9	*Line9*	9
Logic A - Line15	*Line15*	10
Logic B - Line16	*Line16*	11
Lens TXD - Line17	*Line17*	12
Pulse 0 - Line18	*Line18*	13
Pulse 1 - Line19	*Line19*	14
Pulse 2 - Line20	*Line20*	15
Pulse 3 - Line21	*Line21*	16
Uart2 In - Line22	*Line22*	17
Input 0 - Line10	*Line10*	32
Input 1 - Line11	*Line11*	33
Input 2 - Line12	*Line12*	34
Input 3 - Line13	*Line13*	35
Input 4 - Line14	*Line14*	36

Feature

LineMode

Type: Enumeration

GenICam Name: LineMode

Enumeration Entities

Name	GenICam Name	Register Value
Input	*Input*	0
Output	*Output*	1

Feature

LineInverter

Type: Boolean

GenICam Name: LineInverter

Direct Register Access

AccessMode	Address
Read/Write	0xB0200

Feature

LineStatus

Type: Boolean

GenICam Name: LineStatus

Feature

LineSource

Type: Enumeration

GenICam Name: LineSource

Enumeration Entities

Name	GenICam Name	Register Value
Off	*Off*	0
Input 0	*Input0*	1
Input 1	*Input1*	2
CC3	*Input2*	3
CC4	*Input3*	4
Input 4	*Input4*	5
User Output 0	*UserOutput0*	26
User Output 1	*UserOutput1*	27
User Output 2	*UserOutput2*	28
User Output 3	*UserOutput3*	29
User Output 4	*UserOutput4*	30
UART Out	*UartOut*	6
Strobe 0	*Strobe0*	7
Strobe 1	*Strobe1*	8
Strobe 2	*Strobe2*	21
Strobe 3	*Strobe3*	22
PWM 0	*PWM0*	9
PWM 1	*PWM1*	10
PWM 2	*PWM2*	14
PWM 3	*PWM3*	15
Expose	*Expose*	11
Readout	*Readout*	12
SeqPulse A	*SeqPulseA*	13
SeqPulse B	*SeqPulseB*	19
Sequencer active	*SeqActive*	16
Debouncer	*Debouncer*	17
Prescaler	*Prescaler*	18
Logic	*Logic*	20
CC1	*LensUartOut*	23
Triggerfeedback	*Triggerfeedback*	24
CC2	*Uart2Out*	25

Direct Register Access

AccessMode	Address
Read/Write	0xB0100

Feature

LineStatusAll

Type: Integer

GenICam Name: LineStatusAll

Feature

UserOutputSelector

Type: Enumeration

GenICam Name: UserOutputSelector

Enumeration Entities

Name	GenICam Name	Register Value
UserOutput 0	*UserOutput0*	0
UserOutput 1	*UserOutput1*	1
UserOutput 2	*UserOutput2*	2
UserOutput 3	*UserOutput3*	3
UserOutput 4	*UserOutput4*	4

Feature

UserOutputValue

Type: Boolean

GenICam Name: UserOutputValue

Direct Register Access

AccessMode	Address
Read/Write	0xB0080

Feature

UserOutputValueAll

Type: Integer

GenICam Name: UserOutputValueAll

Direct Register Access

AccessMode	Address
Read/Write	0xB0018

Feature

UserOutputValueAllMask

Type: Integer

GenICam Name: UserOutputValueAllMask

Direct Register Access

AccessMode	Address
Read/Write	0xB001C

Lens Control

This category includes items used to set the parameters for the MFT Lens Control

Feature

Lens Available

Type: Boolean

GenICam Name: MFTLensAvailable

Direct Register Access

AccessMode	Address
Read Only	0xA000C

Feature

Lens Name

Type: String

GenICam Name: MFTLensName

Direct Register Access

AccessMode	Address	Length
Read Only	0xA0030	32

Feature

Focal Length

Type: Integer

GenICam Name: MFTFocalLength

This integer value sets the focal length.

Direct Register Access

AccessMode	Address
Read/Write	0xA0100

Feature

Focus

Type: Integer

GenICam Name: MFTFocus

This integer value sets the focus.

Direct Register Access

AccessMode	Address
Read/Write	0xA0120

Feature

Focus Unit

Type: Enumeration

GenICam Name: MFTFocusUnit

This integer value sets the focus unit: 1mm or 1/10mm.

Enumeration Entities

Name	GenICam Name	Register Value
1mm	*mft_unit_mm*	0
Description:	*focus unit 1mm.*	
1/10mm	*mft_unit_deci_mm*	1
Description:	*focus unit 1/10mm.*	

Direct Register Access

AccessMode	Address

Direct Register Access

AccessMode	Address
Read/Write	0xA013C

Feature

Aperture

Type: Integer

GenICam Name: MFTAperture

This integer value sets the aperture.

Direct Register Access

AccessMode	Address
Read/Write	0xA0140

Feature

Lens Control Type

Type: Enumeration

GenICam Name: LensControlType

Selected Lenscontroller type.

Enumeration Entities

Name	GenICam Name	Register Value
none	*none*	0
Description:	*No lens controller available.*	
Birger Mount	*birger*	1
Description:	*Birger Mount connected to camera.*	
Varioptic	*varioptic*	2
Description:	*Varioptic connected to camera.*	
SVCam-EF lens adapter	*svcamef*	3
Description:	*EF lens connected to camera.*	

Direct Register Access

AccessMode	Address
Read/Write	0xB38C

Feature

Focus

Type: Integer

GenICam Name: LensControlFocus

This integer value sets the focus.

Direct Register Access

AccessMode	Address
Read/Write	0xB35C

Feature

Iris

Type: Integer

GenICam Name: LensControlIris

This integer value sets the iris.

Direct Register Access

AccessMode	Address
Read/Write	0xB360

Feature

Lens Init

Type: Command

GenICam Name: LensControlLensInit

Resets the Lens.

Direct Register Access

AccessMode	Address
Write Only	0xB364

Defect Pixel Correction

This category includes items used to set the parameters for the Defect Pixel Correction

Feature

Control

Type: Enumeration

GenICam Name: DefectPixelCorrectionEnable_Control

This enumeration provides a list of the values available for controlling the defect pixel correction.

Enumeration Entities

Name	GenICam Name	Register Value
Off	*Off*	0
Description:	*This enumeration value disables the defect pixel correction.*	
On	*On*	1
Description:	*This enumeration value enables the defect pixel correction.*	

Direct Register Access

AccessMode	Address
Read/Write	0x10004000

Feature

Mark defect pixels

Type: Enumeration

GenICam Name: DefectPixelCorrectionMark_Control

This enumeration provides a list of the values available for setting test modes for the defect pixel correction.

Enumeration Entities

Name	GenICam Name	Register Value
Off	*Off*	0
Description:	*This enumeration value disables the marking of the defect pixels.*	
Mark	*Mark*	1
Description:	*This enumeration value enables the marking of the defect pixels.*	

Direct Register Access

AccessMode	Address
Read/Write	0x10004000

Feature

Defect Pixel Map Enable

Type: Enumeration

GenICam Name: DefectPixelCorrection_MapEnable

This enumeration provides a list of the values available for the defect pixel map enable.

Enumeration Entities

Name	GenICam Name	Register Value
Off	*Off*	0
Description:	*This enumeration value disables the defect pixel map.*	
On	*On*	1
Description:	*This enumeration value enables the defect pixel map.*	

Direct Register Access

AccessMode	Address
Read/Write	0x1000402C

Feature

Hot Pixel Map Enable

Type: Enumeration

GenICam Name: HotPixelCorrection_MapEnable

This enumeration provides a list of the values available for the hot pixel map enable.

Enumeration Entities

Name	GenICam Name	Register Value
Off	*Off*	0
Description:	*This enumeration value disables the hot pixel map.*	
On	*On*	1
Description:	*This enumeration value enables the hot pixel map.*	

Direct Register Access

AccessMode	Address
Read/Write	0x1000402C

Feature

Defect Pixel Map Selector

Type: Enumeration

GenICam Name: DefectPixelCorrection_MapSelect

This enumeration provides a list of maps available for the defect pixel correction.

Enumeration Entities

Name	GenICam Name	Register Value
Factory Map	*factory*	0
Description:	*This enumeration value selects the factory map, containing defect pixels from sensor data sheet.*	
SVS Map	*SVS*	1
Description:	*This enumeration value selects the SVS map, containing defect pixels detected by SVS.*	
Custom Map	*custom*	2
Description:	*This enumeration value selects the custom map, handled by customer.*	

Direct Register Access

AccessMode	Address
Read/Write	0x10004014

Feature

X Offset

Type: Integer

GenICam Name: DefectPixelCorrection_OffsetX

This integer value sets the X offset of the selected map.

Direct Register Access

AccessMode	Address
Read/Write	0x10004008

Feature

Y Offset

Type: Integer

GenICam Name: DefectPixelCorrection_OffsetY

This integer value sets the Y offset of the selected map.

Direct Register Access

AccessMode	Address
Read/Write	0x1000400C

Feature

Defect Pixel Map Size

Type: Integer

GenICam Name: DefectPixelCorrection_MapSize

This integer value reads the current number of defect pixels of the selected map.

Direct Register Access

AccessMode	Address
Read Only	0x1000401C

Feature

Clear selected Defect Pixel Map

Type: Command

GenICam Name: DefectPixelCorrection_MapClear

This command deletes all X/Y coordinates of the selected defect pixel map.

Direct Register Access

AccessMode	Address
Read/Write	0x10004018

Feature

Defect Pixel Map Index

Type: Integer

GenICam Name: DefectPixelCorrection_MapIndex

This value sets the defect pixel map element to access. This value is used to index into a defect pixel map.

Feature

X

Type: Integer

GenICam Name: DefectPixelCorrection_X

This integer value sets the indexed X coordinate of the selected map.

Direct Register Access

AccessMode	Address
Read/Write	Formula

Feature

Y

Type: Integer

GenICam Name: DefectPixelCorrection_Y

This integer value sets the indexed Y coordinate of the selected map.

Direct Register Access

AccessMode	Address
Read/Write	Formula

Feature

Delete selected X/Y coordinates

Type: Command

GenICam Name: DefectPixelCorrection_Delete

This command deletes the indexed X/Y coordinates of the selected map.

Direct Register Access

AccessMode	Address
Write Only	0x10004024

Feature

Hot Pixel Map Selector

Type: Enumeration

GenICam Name: HotPixelCorrection_MapSelect

This enumeration provides a list of maps available for the hot pixel correction.

Enumeration Entities

Name	GenICam Name	Register Value
Hot Pixel Map 0	*HotPixMap0*	0
Description:	*This enumeration value selects the hot pixel map 0.*	
Hot Pixel Map 1	*HotPixMap1*	1
Description:	*This enumeration value selects the hot pixel map 1.*	
Hot Pixel Map 2	*HotPixMap2*	2
Description:	*This enumeration value selects the hot pixel map 2.*	
Hot Pixel Map 3	*HotPixMap3*	3
Description:	*This enumeration value selects the hot pixel map 3.*	
Hot Pixel Map 4	*HotPixMap4*	4
Description:	*This enumeration value selects the hot pixel map 4.*	

Direct Register Access

AccessMode	Address
Read/Write	0x1004F014

Feature

Hot Pixel Map Size

Type: Integer

GenICam Name: HotPixelCorrection_MapSize

This integer value reads the current number of hot pixels of the selected map.

Direct Register Access

AccessMode	Address
Read Only	0x1004F028

Feature

Clear selected Hot Pixel Map

Type: Command

GenICam Name: HotPixelCorrection_MapClear

This command deletes all X/Y coordinates of the selected hot pixel map.

Direct Register Access

AccessMode	Address
Read/Write	0x1004F018

Feature

Hot Pixel Map Index

Type: Integer

GenICam Name: HotPixelCorrection_MapIndex

This value sets the Hot pixel map element to access. This value is used to index into a hot pixel map.

Feature

X

Type: Integer

GenICam Name: HotPixelCorrection_X

This integer value sets the indexed X coordinate of the selected map.

Direct Register Access

AccessMode	Address
Read/Write	Formula

Feature

Y

Type: Integer

GenICam Name: HotPixelCorrection_Y

This integer value sets the indexed Y coordinate of the selected map.

Direct Register Access

AccessMode	Address
Read/Write	Formula

Feature

Delete selected X/Y coordinates

Type: Command

GenICam Name: HotPixelCorrection_Delete

This command deletes the indexed X/Y coordinates of the selected map.

Direct Register Access

AccessMode	Address
Write Only	0x1004F024

Shading

This category includes items used to set the parameters for the Shading Correction

Feature

Shading Control

Type: Enumeration

GenICam Name: Shading_Control

This enumeration provides a list of the values available for controlling the shading correction.

Enumeration Entities

Name	GenICam Name	Register Value
Off	*Off*	0
Description:	*This enumeration value disables the shading correction.*	
On	*On*	2
Description:	*This enumeration value enables the shading correction.*	

Direct Register Access

AccessMode	Address
Read/Write	0x10000000

Feature

Shading Status

Type: Enumeration

GenICam Name: Shading_Status

This enumeration provides a list of the values available for the operating states of the shading correction.

Enumeration Entities

Name	GenICam Name	Register Value
Shading Error	*Shading_Error*	0
Description:	*This enumeration value shows shading error.*	
Shading Ready	*Shading_Ready*	1
Description:	*This enumeration value shows shading is ready.*	
Shading acquiring dark image	*Shading_Dark*	2
Description:	*This enumeration value shows shading is acquiring a dark image.*	
Shading acquiring white image	*Shading_White*	3
Description:	*This enumeration value shows shading is acquiring a white image.*	
Shading saving reference data	*Shading_Save*	4
Description:	*This enumeration value shows shading is saving reference data.*	
Shading initialized	*Shading_Init*	5
Description:	*This enumeration value shows shading is initialized.*	

Direct Register Access

AccessMode	Address
Read Only	0x10000010

Feature

Get a white image out of focus

Type: Command

GenICam Name: Shading_Get_White_Image

This command gets a white image for the shading correction.

Direct Register Access

AccessMode	Address
Write Only	0x10000008

Feature

Save reference data

Type: Command

GenICam Name: Shading_Save_RefData

This command saves reference data from white image for the shading correction.

Direct Register Access

AccessMode	Address
Write Only	0x1000000C

Debug

Feature

RegisterAddress Type: Integer

GenICam Name: RegisterAddress

Feature

RegisterValue Type: Integer

GenICam Name: RegisterValue