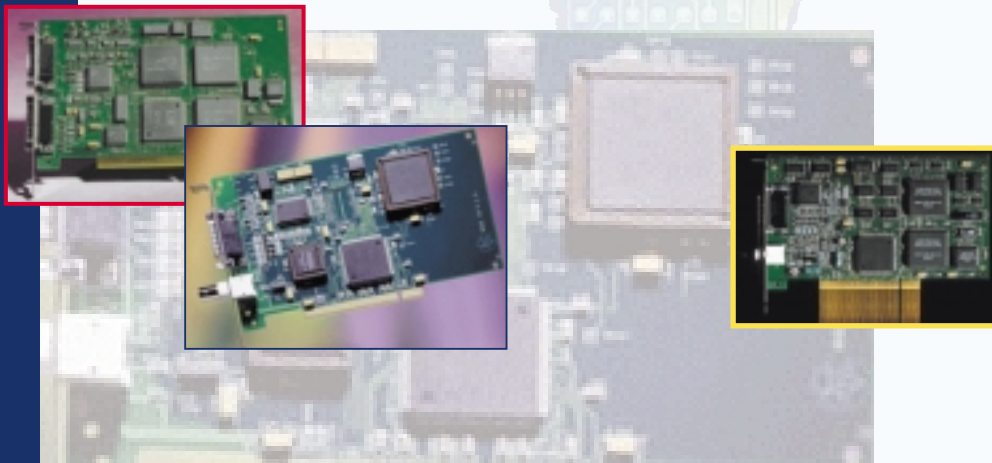


HALCON

THE SOFTWARE SOLUTION FOR MACHINE VISION APPLICATIONS

Frame Grabber Interface for Data Translation DT3152, DT3153, and DT3155 DATA TRANSLATION™



Features

- Supported operating system: Windows NT 4.0
- Multiple frame grabber boards with multiple cameras
- Synchronous and asynchronous grabbing
- External trigger
- Subsampling
- Cropping of image parts (DT3152 only)
- Software control of grabbing timeout
- Software control of "black" and "white" level
- Software control of sync mode and field to be grabbed

Note: The frame grabber may support additional features not integrated in HALCON so far.
Please contact the vendor directly.

HALCON Frame Grabber Interface for Data Translation DT3152, DT3153, and DT3155

Revision: 1.24

► Description of Parameters for `open_framegrabber()`:

Name	'DT315x'	The name of the HALCON frame grabber interface.
FGWidth	1, 2, 4, width	The desired image resolution. Use '1' for full resolution, '2' for subsampling by factor 2, '4' for subsampling by factor 4, or the corresponding absolute values 640, 320, 160 (NTSC) or 768, 384, 192 (PAL).
FGHeight	1, 2, 4, height	The desired image resolution. Use '1' for full resolution, '2' for subsampling by factor 2, '4' for subsampling by factor 4, or the corresponding absolute values 480, 240, 120 (NTSC) or 576, 288, 144 (PAL).
Width	0, width	The width of the desired image part (use '0' for the complete image). Values other than '0' are only supported by the DT3152.
Height	0, height	The height of the desired image part (use '0' for the complete image). Values other than '0' are only supported by the DT3152.
StartRow	0, row	The row coordinate of the upper left pixel within the desired image part (use '0' for the complete image). Values other than '0' are only supported by the DT3152.
StartColumn	0, column	The column coordinate of the upper left pixel within the desired image part (use '0' for the complete image). Values other than '0' are only supported by the DT3152.
Field	—	Ignored.
Bits	8, 24	Number of bits per pixel: Grayscale (8 bits) or color (24 bits). 24 bits are supported by the DT3153 only.
ColorSpace	—	Ignored.
Gain	—	Ignored.
ExternalTrigger	'true', 'false'	Activate/deactivate external triggering.
Generic	'default', 'volatile'	In the volatile mode (8 bits only) the two frame grabber interface buffers are used directly to store HALCON images. This is the fastest mode avoiding to copy raw image data in memory.
Device	'default', 'name'	The name of the frame grabber board you have specified during the installation of the Data Translation software. Use 'default' if there is only one framegrabber board in your PC.
Port	—	Ignored.
LineIn	1, 2,...	The desired input line, i.e., camera (if you use multiple cameras per frame grabber board).

► Description of Parameters for `set_framegrabber_param()`:

'timeout'	seconds	The timeout value for the grabbing of images.
'sync_sentinel'	'enable', 'disable'	Activate/deactivate the "Sync Sentinel" of the board.
'based_source'	'enable', 'disable'	Activate/deactivate the "Based Source Mode".
'frame_type'	'even_field_first', 'odd_field_first', 'next_field_first', 'even_field_only', 'odd_field_only', 'next_field_only', 'noninterlaced'	Select which field should be grabbed.
'watch_dog'	'enable', 'disable'	Activate/deactivate the experimental watchdog timer. Note, that Data Translation fails to return an error code in order to detect timeouts. Thus, the previous image is delivered again and again. With this watchdog enabled, a HALCON error is reported instead.
'black_level'	millivolts	The desired voltage level for 'black' pixels in millivolts (floating point number). The valid range for a particular board can (and should) be queried via <code>get_framegrabber_param()</code> calls with 'Param' set to 'black_level_min' and 'black_level_max', respectively.
'white_level'	millivolts	The desired voltage level for 'white' pixels in millivolts (floating point number). The valid range for a particular board can (and should) be queried via <code>get_framegrabber_param()</code> calls with 'Param' set to 'white_level_min' and 'white_level_max', respectively.

See the HALCON documentation for a detailed description of these generic frame grabber operators and visit <http://www.mvtec.com/halcon/framegrabber/> for updates and a complete list of current HALCON frame grabber interfaces.

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