Compare Frame Grabbers ≫

	Analog			Analog / SDI	Analog / DVI-D / SDI	Camera Link ®			CoaXPress	GigE Vision®	IEEE 1394
	Matrox Morphis (e)Dual	**Matrox Morphis (e)Quad**	**Matrox Solios eA/XA**	**Matrox Vio**	**Matrox Orion HD**	**Matrox Solios eCL/XCL-B**	**Matrox Solios eV-CL**	**Matrox Radient eCL**	**Matrox Radient eV-CXP**	**Matrox Concord G-series**	**Matrox Concord F-series**
Form Factor	PCI, PC-104, PCIe® 1.0 x1	PCIe® 1.0 x1	PCIe® 1.0 x4	PCIe® 1.0 x4	PCIe® 1.0 x16	PCI-X®, PCIe® 1.0 x1	PCIe® 1.0 x4	PCIe® 1.0 x8	PCIe® 2.0 x8	conventional PCI, PCIe® 1.0 x1	conventional PCI, PCIe® 1.0 x1
Acquisition Format	standard analog monochrome or color	standard analog monochrome or color	standard and non-standard analog monochrome or component RGB frame or line scan	HD (720p or 1080i) or SD analog CVBS, RGB, YPbPr and Y/C optional SDI	HD (up to 1080p) or SD DVI-D analog, CVBS, RGB, YPrPb and Y/C SDI	Base Camera Link® with PoCL (Power Over Camera Link®) monochrome or color frame or line scan	Base Camera Link® with PoCL (Power Over Camera Link®) Medium/Full Camera Link® monochrome or color frame or line scan	Base Camera Link® with PoCL (Power Over Camera Link®) Medium/Full Camera Link® monochrome or color frame or line scan	Dual or Quad CoaXPress (CXP) with PoCXP (Power over CoaXPress) monochrome or color frame or line scan	GigE Vision®	IEEE 1394 IIDC
Acquisition Rate	square pixel	square pixel	up to 65 MHz	CCIR-601 square pixel for SD up to 80 MHz for RGB	up to 60Hz (at up to 1920 x 1200)	up to 85 MHz[2]	up to 85 MHz up to 10 taps (eV-CLF/CLFL)[3]	up to 85 MHz up to 10 taps (eCL-F)	up to 6.25 Gbps (CXP-6) per connection up to 25 Gbps using four connections	10/100/1000 Mbps	S400, S800
On-board Processing							Bayer (2x2 average) interpolation (eV-CLB/CLBL)	Altera® Stratix® III Processing FPGA with 110K up to 340K logic elements and 133 MHz operation	Bayer (2x2 average) interpolation color space conversion		
Memory	16 MB	16 MB	64 MB	128 MB	1 GB	64 MB	256 MB	2 GB SDRAM up to 32 MB SRAM	1 GB		
Additional Features	simultaneous capture from up to two independent video sources connect up to 16 video inputs auxiliary digital I/Os (including trigger input) RS-485 serial port	simultaneous capture from up to four independent video sources connect up to 16 video inputs auxiliary digital I/Os RS-485 serial port	simultaneous capture from up to four independent video sources video synchronization (including trigger input and exposure output) and auxiliary digital I/Os RS-232 serial port	video source presence detection video output - auxiliary (not for OS desktop) - low latency - synchronized to video input - HD (720p or 1080i) or SD[1] - analog CVBS, RGB, YPbPr and Y/C - optional SDI true-color non-destructive graphic overlay	simultaneous capture from up to four independent video sources[4] four independent outputs - primary or secondary system display - independent from input format - standard graphics overlay - HD (up to 1080p) or SD - DVI-D - analog RGB - SDI programmable color space converter	video synchronization (including trigger input and exposure output) and auxiliary digital I/Os serial ports optional low-profile bracket	connect up to two independent Base (eV-CLB/eV-CLBL) or one Medium/Full (eV-CLF/CLFL) Camera Link® camera(s) video synchronization (including trigger input and exposure output) and auxiliary digital I/Os serial ports	connect up to four independent Base (eCL-QB) or two Medium/Full (eCL-DF) Camera Link® cameras video synchronization (including trigger input and exposure output) and auxiliary digital I/Os serial ports	connect up to four independent cameras or a single quad channel camera[5] video synchronization (including trigger input and exposure output) and auxiliary digital I/Os	pre-licensed for use with MIL for GigE Vision® driver pre-configured for optimal GigE Vision® performance	pre-licensed for use with MIL IEEE 1394 IIDC driver

1. No support for transcoding (i.e. video output resolution and rate is identical to video input resolution and rate). 2. PCIe® x1 versions support a maximum acquisition rate of 250 MB/s under continuous use. 3. 10-tap acquisition restricted to 70 MHz maximum.
4. Via two DVI-I and two SDI inputs, with display disabled. 5. With model supporting Quad CXP.