Compare hardware

	Analog						Analog / SDI	Camera Link®				GigE Vision®		IEEE 1394
	Morphis (e)Dual	Morphis (e)Quad	Morphis QxT	Morphis Evo	Solios eA/XA	Helios eA/XA	Vio	Solios eCL/XCL-B	Solios eV-CL	Helios eCL/XCL	Radient eCL	Concord G-series	Solios GigE	Concord F-series
Form Factor	• PCI, PC-104, PCIe® x1	•PCI-X®, PCIe® x1	•PCIe® x4	• PCIe® x1	• PCI-X®, PCIe® x4	• PCI-X®, PCIe® x4	• PCIe® x4	• PCI-X®, PCIe® x1	• PCIe® x4	• PCI-X®, PCIe® x4	• PCIe® x8	• conventional PCI, PCIe® x1	• PCIe® x4	• conventional PCI, PCIe® x1
Acquisition Format	• standard analog • monochrome or color	• standard analog • monochrome or color	• standard analog (D1 and CIF) • monochrome or color	• standard analog (D1 and CIF) • monochrome or color	• standard and non-standard analog • monochrome or component RGB • frame or line scan	• 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	• 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/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	• GigE Vision®	• GigE Vision®	• IEEE 1394 IIDC
Acquisition Rate	• square pixel	• square pixel	• square pixel	• CCIR-601	• up to 65 MHz	• up to 80 Mhz (RGB) • up to 160 MHz (monochrome)	• CCIR-601 • square pixel for SD • up to 80 MHz for RGB	• up to 85 MHz[3]	• up to 85 MHz • up to 10-taps (eV-CLF)	• up to 85 MHz	• up to 85 MHz • up to 10-taps (eCL-F)	• 10/100/1000 Mbps	• 10/100/1000 Mbps	• S400, S800[4]
On-board Processing	• JPEG2000 accelerator		• multi-channel MPEG-4 encoder	• multi-channel H.264 encoder		• Matrox Oasis ASIC			• on-board Bayer (2x2 average) interpolation (eV-CLB)	• Matrox Oasis ASIC	• Altera® Stratix® III/IV Processing FPGA with 110K up to 320K logic elements and 133 MHz operation			• optional customizable FPGA-based processing core
Memory	• 16 MB for video capture • 16 MB for processing	• 16 MB for video capture • 16 MB for processing	• 128 MB for video capture • 128 MB for processing	• 320 MB shared	• 64 MB for video capture	• 256 MB shared	• 128 MB shared	• 64 MB for video capture	• 256 MB for video capture	• up to 1 GB shared	• up to 4 GB SDRAM • up to 32 MB SRAM			• 128 MB for video capture • up to 256 MB optional for processing
Additional Features	• simultaneous capture from up to two independent video sources • connect up to 16 video inputs • auxiliary digital I/Os (including trigger input[1]) • RS-485 serial port	• simultaneous capture from up to four independent video sources • connect up to 16 video inputs • auxiliary digital I/Os (including trigger input[1]) • RS-485 serial port	• simultaneously capture from up to 16 independent video sources • 16 audio inputs[1] • analog video outputs • auxiliary digital I/Os • watchdog timer	• simultaneously capture from up to 16 independent video sources • 16 audio inputs[1] • analog video output • auxiliary digital I/Os • watchdog timer • RS485/422 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 ports	• 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 ports	• video source presence detection • video output - auxiliary (not for OS desktop) - low latency - synchronized to video input - HD (720p or 1080i) or SD[2] - analog CVBS, RGB, YPbPr and Y/C - optional SDI true-color non-destructive graphic overlay • 20-bit video quality throughout	• 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) or one Medium/Full (eV-CLF) Camera Link® camera(s) • video synchronization (including trigger input and exposure output) and auxiliary digital I/Os • serial ports	• connect up to two independent Base or one Medium/Full 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/O's • serial ports	• pre-licensed for use with MIL for GigE Vision® driver • pre-configured for optimal GigE Vision® performance	• up to four independent GbE ports • filters packets from up to four GigE Vision® streams • video synchronization (including trigger input and exposure output) and auxiliary digital I/Os	• pre-licensed for use with MIL IIDC driver

Notes:
1. Only available as part of the MPEG-4 stream.
2. No support for transcoding (i.e. video ouput resolution and rate is identical to video input resolution and rate).
3. PCIe® x1 versions support a maximum acquisition rate of 250 MB/s under continuous use.
4. S800 mode is only supported under Windows® XP using MIL.