

Matrox **Solios eCL-B** >>>

Entry-level Camera Link frame grabber

Overview

Cost-optimized and value-packed design

Matrox® Solios eCL-B is a Camera Link® frame grabber for cost-sensitive applications. Its acquisition capabilities and PCIe® bus interface make the Matrox Solios eCL-B an excellent match for entry-level cameras.

Versatile Camera Link interface

Matrox Solios eCL-B operates as a single-Base Camera Link frame grabber featuring PoCL with SafePower. With an acquisition speed of up to 85 MHz³ and multi-tap support—including complete image reconstruction²—the Matrox Solios eCL-B is able to handle most popular entry-level industrial or scientific area- and line-scan cameras. It can also transparently convert between monochrome and packaged/planar RGB color spaces, enabling optimum representation of image data for processing and/or display, freeing valuable host resources.

Matrox Solios eCL-B at a glance

Handle one Base Camera Link configuration^{1,2}

Leverage Power-over-Camera-Link (PoCL)
with SafePower

Acquire at rates up to 85 MHz³

Benefit from a 64 MB acquisition buffer

Capture from frame- and line-scan cameras

Perform complete image reconstruction from multi-tap cameras²

Use the serial communication port mapped as PC COM port

Support rotary encoders with quadrature output

Program using Matrox Imaging Library (MIL) X
(sold separately)

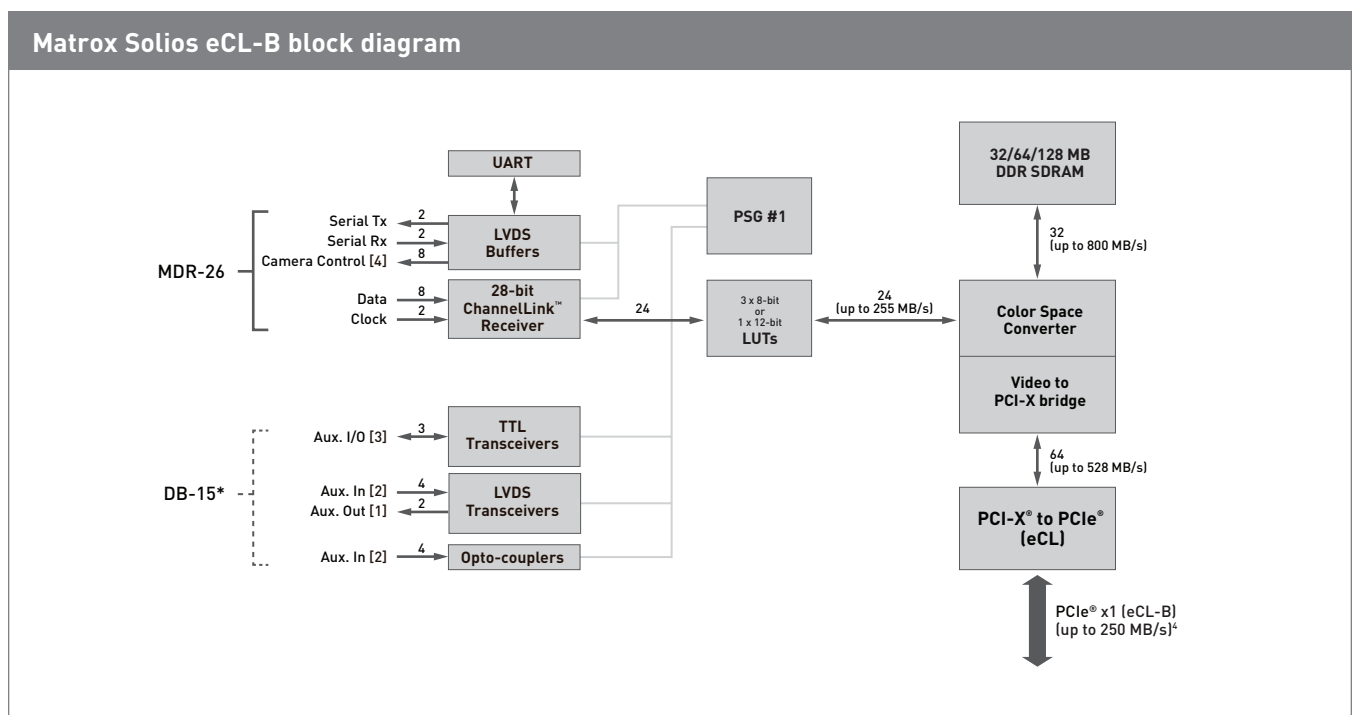
Maintain flexibility and choice by way of support for 32-/64-bit Windows® 7/10 and 64-bit Linux®

Software Environment

Field-proven application development software

Matrox Solios eCL-B is supported by MIL X, a comprehensive collection of software tools for developing industrial imaging applications. MIL X features interactive software and programming functions for image capture, processing, analysis, annotation, display, and archiving. These tools are designed to enhance productivity, thereby reducing the time and effort required to bring solutions to market. Refer to the MIL X datasheet for more information.

Connectivity



Specifications

| Matrox Solios eCL-B |
|---|
| Hardware |
| PCIe x1 card |
| 64 MB of 100 MHz DDR SDRAM for acquisition |
| Handles a single Camera Link Base port ^{1,2} |
| PoCL with SafePower |
| Channel Link™ speed of up to 85 MHz ³ |
| Supports frame and line-scan video sources |
| Full-tap reconstruction from multi-tap sources ² |
| One (1) 4K x 12-bit or three (3) 256 x 8-bit LUTs |
| Three (3) TTL configurable auxiliary I/Os |
| Two (2) LVDS configurable auxiliary inputs |
| One (1) LVDS configurable auxiliary outputs |
| Two (2) opto-isolated configurable auxiliary inputs |
| Serial communication port mapped as a PC COM port |
| Physical |
| Dimensions (L x W x H): 16.8 x 6.4 x 1.57 cm (6.6 x 2.5 x 0.62 in) from bottom edge of goldfinger to top edge of board and without bracket. |
| Certifications |
| FCC class B |
| CE class B |
| RoHS-compliant |
| Environmental |
| Operating temperature: 0°C to 55°C (32°F to 131°F) |
| Relative humidity: Up to 95% (non-condensing) |
| Software |
| Software drivers: MIL drivers for 32-/64-bit Windows 7 |
| Software drivers: MIL drivers for 32-/64-bit Windows 10 |
| Software drivers: MIL drivers for 64-bit Linux |

Ordering Information

| Part number | Description |
|---|--|
| Hardware | |
| SOL 6M CLB E* | Matrox Solios eCL-B Single-Base up to 85 MHz Camera Link PCIe x1 frame grabber with 64 MB DDR SDRAM. |
| Software | |
| Refer to MIL X datasheet . | |
| Cables | |
| Camera Link cables are available from camera manufacturers, 3M Interconnect Solutions (www.3m.com), Intercon1 (www.intercon-1.com), or other third parties. Cables for cable adaptor boards are available from third parties. | |

- Endnotes:
1. Refer to Camera Link specifications for more information.
 2. Maximum of two zones, up to three taps, and excludes time multiplexing.
 3. Support a maximum acquisition rate of 250 MB/s under continuous use.

The Matrox Imaging advantage



Assured quality & longevity

Adhering to industry best practices in all hardware manufacturing and software development, product designs pay careful attention to component selection to secure consistent long-term availability. Matrox Imaging is able to meet Copy Exact and Revision Change Control procurement requirements in particular circumstances, backed by a dedicated team of QA specialists.



Trusted industry standards

Matrox Imaging champions industry standards in its design and production. Leveraging these standards to deliver quality compatible products, Matrox Imaging protects its customers' best interests by ensuring hardware and software components work with as many third-party products as possible.



Comprehensive customer support

Devoted front-line support and applications teams are on call to offer timely product installation, usage, and integration assistance. Matrox Professional Services delivers deep technical assistance to help customers develop their particular applications in a timely fashion. Services include personalized training and device interfacing as well as application feasibility, prototyping, troubleshooting, and debugging.



Tailored customer training

Matrox Vision Academy comprises online and on-premises training for Matrox Imaging vision software tools. On-premises intensive training courses are regularly held at Matrox headquarters, and can also be customized for onsite delivery. The Matrox Vision Academy online training platform hosts a comprehensive set of on-demand videos available when and where needed.



Long-standing global network

Matrox Imaging customers benefit from a global network of distributors who offer complementary products and support, and integrators who build customized vision systems. These relationships are built on years of mutual trust and span the globe, ensuring customer access to only the best assistance in the industry.



About Matrox Imaging

Founded in 1976, Matrox is a privately held company based in Montreal, Canada. Imaging, Graphics, and Video divisions provide leading component-level solutions, leveraging the others' expertise and industry relations to provide innovative, timely products.

Matrox Imaging is an established and trusted supplier to top OEMs and integrators involved in machine vision, image analysis, and medical imaging industries. The components consist of smart cameras, 3D sensors, vision controllers, I/O cards, and frame grabbers, all designed to provide optimum price-performance within a common software environment.

Contact Matrox

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