

ONE TECHNOLOGY PLACE - HOMER, NEW YORK 13077

TEL: +1 607 749 2000 FAX: +1 607 749 3295 www.PanavisionImaging.com / Sales.PVI@Panavision.com

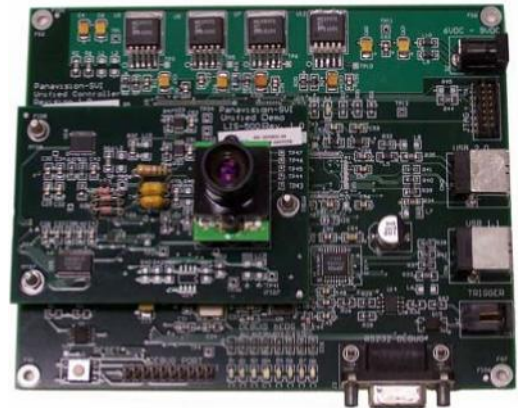
Line Scan Image Sensor Demonstration Kit

For: LIS-1024, LIS-500, RPLIS-2048, ELIS-1024, DLIS-2K/4K and SLIS-2048

Key Features:

- **Demonstrates all capabilities of our image sensors**
- **USB 1.1 Interface** – can connect to most PCs
- **Flexible System Design**
 - 12 bit A/D to digitize the sensor analog output
 - 12 bit DACs to adjust ADC range and offset
 - Hardware and software triggers or free-run mode for frame capture
 - Dual board set
 - Motherboard contains FPGA, USB interface, JTAG, RS-232 (for debug), General Purpose I/O, debug LEDs, power, etc.
 - Sensor Daughter board contains selected sensor and sensor related hardware, ADC, DACs, etc. Also contains user configurable filtering to allow user to optimize sensor performance at the selected operating speed and/or for a particular application.
- **Graphical User Interface and drivers included:**
 - Display ‘Oscilloscope’ graphs of pixel data
 - Capture, display, store, and retrieve 2D bitmap images up to 100 lines vertically
 - Enables user to select operating modes of sensor – control readout mode, gain, threshold, hysteresis, etc. where applicable for the installed sensor.
 - Control kit operating parameters
- **Programmable FPGA**
 - JTAG port enables user to modify FPGA code
- **Lens Mount**
 - All Daughter boards are supplied with a lens mount.
 - ~ Supplied lens mount accepts M12 x 0.5P 1/2” optical format lenses except SLIS-2048, and DLIS-4K which accepts 1” format ‘CS’ lens. The DLIS-2K can ship with either 1” or M12x0.5P optical format lens mount
- **Source Code**
 - Selected FPGA and GUI source code¹ and full schematics provided
- **Complete System**
 - Includes software, drivers, USB cable, and universal power supply[†]
 - [†]May require power adaptor for international power receptacles.

LIS-500 demo



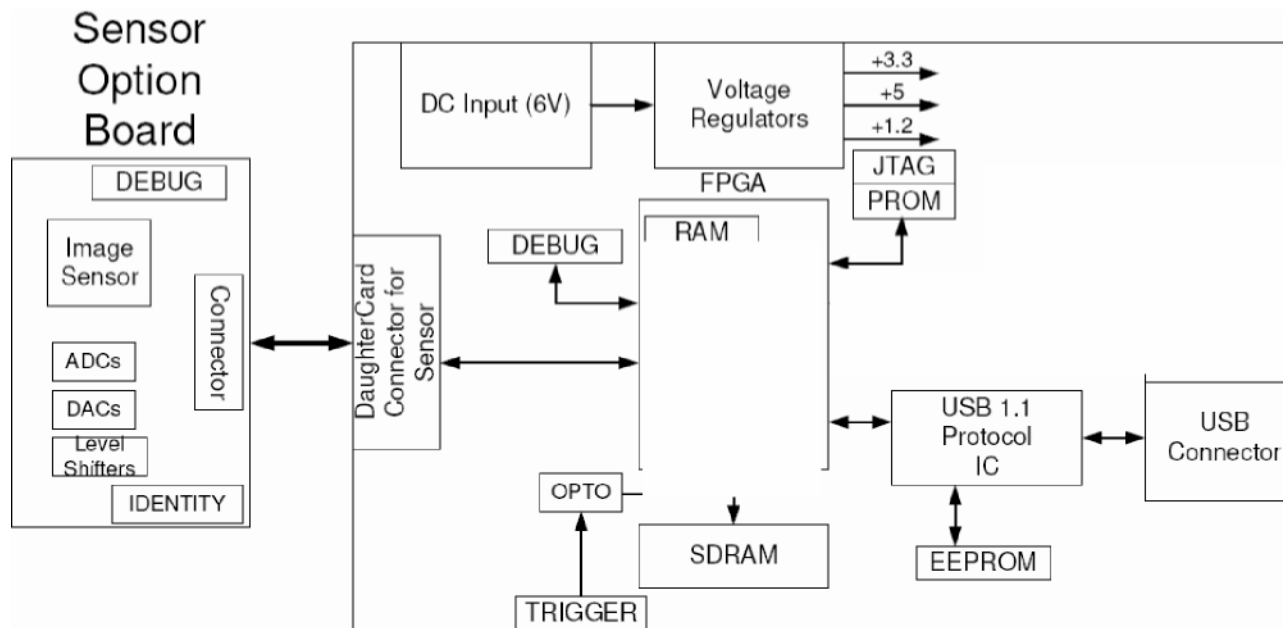
¹ Selected Source code modules provided. Software tools not provided. Modification of FPGA code may require ^{3rd} party IP licensing – refer the full Line Scan Image Sensor Demonstration specification for details.

DESCRIPTIVE OVERVIEW:

The line scan demonstration kit is a complete image sensor control and acquisition system configured as a USB 'board' camera. It is configured as a two board system, a motherboard and a sensor specific daughter board. Daughter boards are interchangeable. The system can capture up to 100 lines of data and then sends the data to the user's PC via the USB interface. The provided graphical user interface can display video waveforms on the PC monitor much like an oscilloscope or the kit can capture and display 2D bitmap gray scale images up to 100 lines high. Images can be stored, retrieved, and displayed and are saved in standard .bmp image format which can be further analyzed by the user. Oscilloscope traces can also be saved, the data points are saved to a .txt file which can be imported into most application programs for further analysis.

SIMPLIFIED BLOCK DIAGRAM

Main Control Board



SYSTEM REQUIREMENTS:

Pentium III or better with 64k or more RAM running Windows® XP, Windows® Vista or Windows® 2000 operating system, CD drive, and XGA or better color monitor.

Power: 100 – 240 VAC, 50 – 60Hz, 0.6 Amps

Demonstration Kit Ordering Information:

Control Board A - P/N DBD0003-A (Programmed for all non-DLIS cards)

Control Board B - P/N DBD0003-B (Programmed for DLIS-2K/4K only)

Each Control Board – includes power supply, USB cable and software

Optional Daughter Cards:

- LIS-1024 Daughter card – P/N ADC-LIS-1024A.
- ELIS-1024 Daughter card – P/N ADC-ELIS-1024A.
- LIS-500 Daughter card – P/N ADC-LIS-500A.
- RPLIS-2048 Daughter card – P/N ADC-RPLISEX
- DLIS-2KA Daughter card – P/N ADC-DLIS2KA (std lens mount)
- DLIS-2KB Daughter card – P/N ADC-DLIS2KB (C-mount)
- DLIS-4K Daughter card – P/N ADC-DLIS4KA
- SLIS-2048 Daughter card – P/N ADC-SLIS-2048A

Daughter cards come with standard M12x0.5P lens mount.

Optional Lens^{*}: 16mm focal length – Mx16P; 25mm focal length – Mx25P

^{*}Not for SLIS daughter card. SLIS daughter card accepts only standard ‘CS’ style lenses, not supplied

^{*}Not for DLIS-4K daughter card. DLIS-4K daughter card accepts only standard ‘CS’ style lenses, not supplied

ORDERING INFORMATION:

Complete Part number is DBD-0003A or B + ADC-XXXXXXX, where XXXXXX is the desired daughter board.

For example, to order an SLIS-2048 demo kit the complete part number is DBD-0003A + ADC-SLIS2048A

Additional Daughter boards may be ordered. Just specify the part number for the board as shown on this page.

All Daughter boards are supplied with a lens mount. All Daughter boards except SLIS-2048 require 1/2” optical format lenses with M12 x 0.5P barrel for best performance. SLIS-2048 requires 1” optical format ‘CS’ type lens. DLIS-2K ships with std M12 x 0.5P barrel with the option to include the 1” optical format C-mount.

FOR MORE INFORMATION CONTACT YOUR LOCAL DISTRIBUTOR OR DIRECT:

Panavision Imaging Tel: +1 607 749 2000 Fax: +1 607 749 3295

[email: Sales.PVI@Panavision.com](mailto:Sales.PVI@Panavision.com)

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