

LightWise LW-ELIS-1024A-1394

High Performance Line Scan Camera



Description:

The LightWise LW-ELIS-1024A Line Scan Camera provides an Ultra-High performance Linear Imager with high quality high-speed video with excellent response characteristics. The low cost and ease of integration into existing systems make it an excellent solution for a wide variety of applications. The interfaces to the Imaging Module are industry standard to provide ease of integration into target systems.

The ELIS Imagers operate at rates up to 10 MHz with 14-bit pixel resolution.

IEEE-1394 FireWire™ is IIDC DCAM Spec. Version 1.3 Compliant.

The camera has external opto-isolated programmable input/output's for trigger/strobe functions.

Key Specifications:

- Linear Resolution: 1024 Pixels
- Data Rate: Up to 10 Mpixels / second
- Data Resolution: On-Board 14 bit A to D
- High Sensitivity and Wide Dynamic Range
- On-Board FPN Correction
- Standard IEEE-1394a Firewire™ Interface
 - o Fully Compliant to IEEE-1394 IIDC DCAM Specification
Version 1.3
- Single 12V Supply
- Compact Form Factor
- User Programmable: *Integration Time, Multiple Gain Adjustments, Offset, Bit Depth, and Data Rate*
- Built-In Test Pattern
- External Trigger Option

Offset and Gain Correction:

The Offset and Gain correction task will be performed by the FPGA on the Controller board. The FPGA algorithms in conjunction with an on-board dual 8-bit DAC perform automatic offset correction and semiautomatic gain corrections. These functions can be selected and activated by the provided ISG Graphical User Interface (GUI) software.

Customizable via FPGA's On-Board:

The On-Board FPGA allows for easy integration of custom algorithms and signal processing. Up to 400K gate equivalents and memory is available for custom hardware. This provides the user the opportunity to offload high speed imaging functions from the host computer.

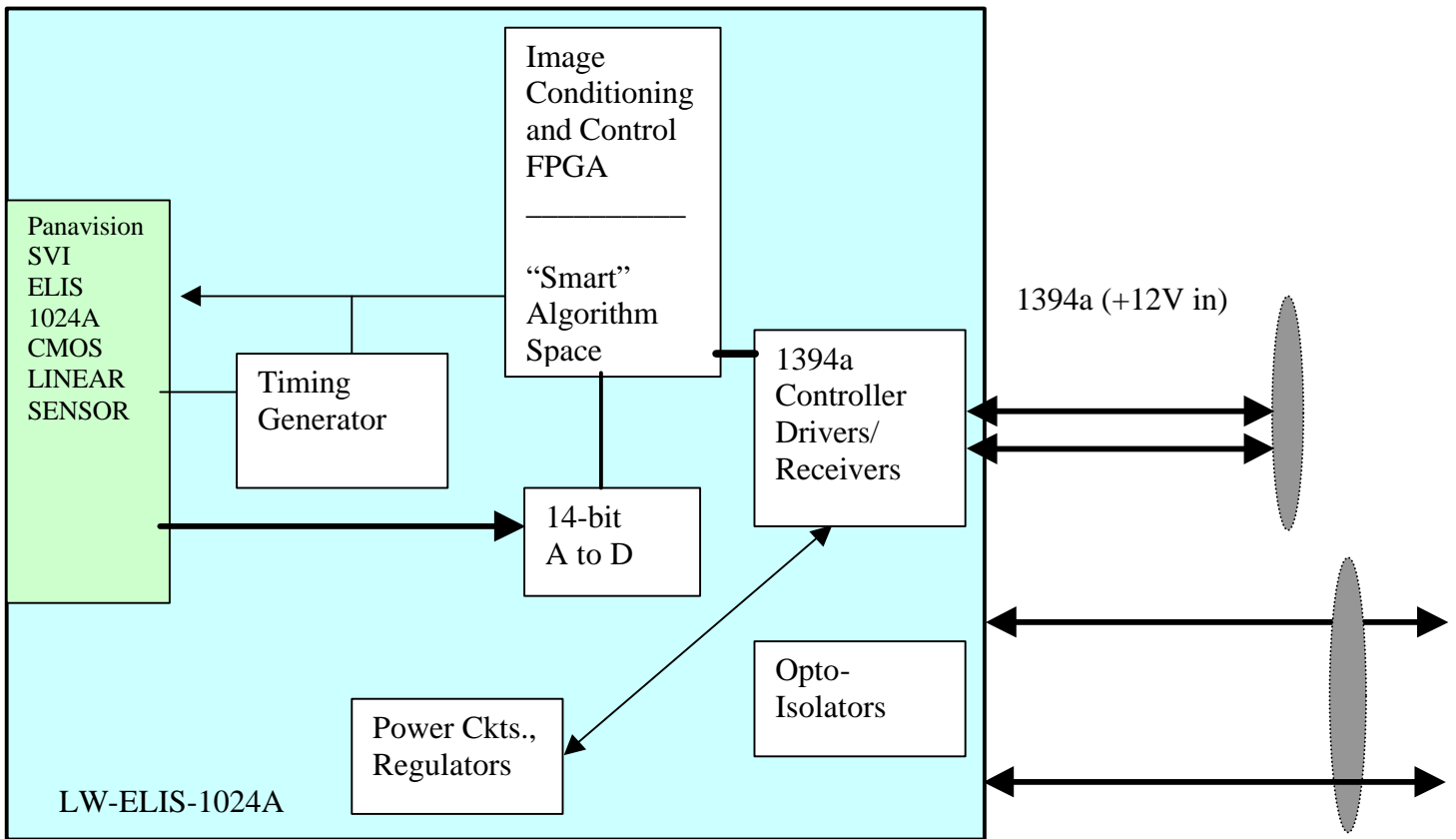
Applications include:

**High Speed High Resolution Scanning
Automated Inspection Systems
Machine Vision Systems
Positioning**

**Contact Imaging
Bar Code reading
Encoding and**

LW-ELIS-1024A-1394

IEEE-1394 FireWire™ Version



Optional External Sync
Programmable I/O
(with +5V, +12V out)