Industrial Linescan Camera Module

The linescan sensor module consist of high speed linear image sensor (Monochromatic), ADC, Noise filter and Amplifiers. The Linear Image Sensor consists of an array of high performance, low dark current photo-diode pixels. The sensor features sample and hold capability, selectable resolution and advanced power management. The device can operate at voltages as low as 2.8V making it ideal for portable applications. A key feature over traditional CCD technology is that the device can be read and reread Non-Destructively, allowing the user to maximize signal to noise and dynamic range. Internal logic automatically reduces power consumption when lower resolution settings are selected. A low power standby mode is also available to reduce system power consumption when the imager is not in use.

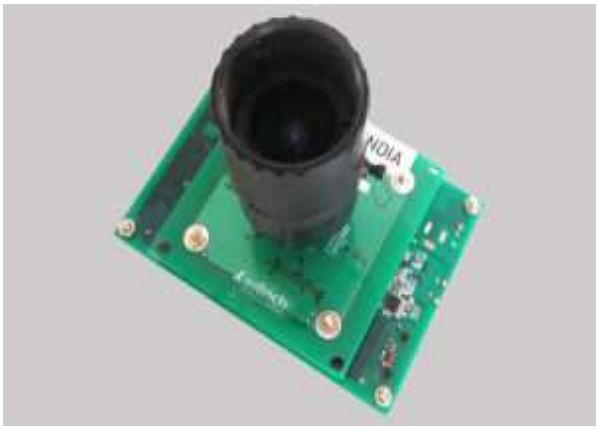
Key features

- USB 2.0 interface*
- Sync Output for strobe
- Flat-field correction
- User configurable exposure time
- Line scan rate: 29,000 lines/second(Max)
- USB bus powered / Self powered operation
- Full Frame Shutter and Dynamic Pixel Reset (DPR) Modes
- Supports C Mount, CS Mount and M12 lenses
- Full Frame Shutter and Dynamic Pixel Reset (DPR) Modes
- User configurable Resolutions of 1024, 512, 256 and 128 pixels
- RS232 / RS422(20Mbps max) / RS485 (20Mbps max) Interface

* USB 2.0 is implemented using FT232H USB controller in FT1248 4-bit mode.

Board features

- Linescan sensor:- High speed linear image sensor
- FPGA:- Spartan 6



Linescan camera module

- ADC:- 8 bit, 60 MHz sampling ADC or 12-bit 20MHZ ADC (Optional)
- DAC :- 12BIT (Optional)
- Noise filters
- Differential amplifiers
- Buffers

Board Dimensions

	Board	Dimensions (mm)
1	Sensor module	75*75*1.5
2	Lens mount	22*20*2
3	Main board (FPGA)	110*76*1.5