

RasaAndishan Moj Pardaz

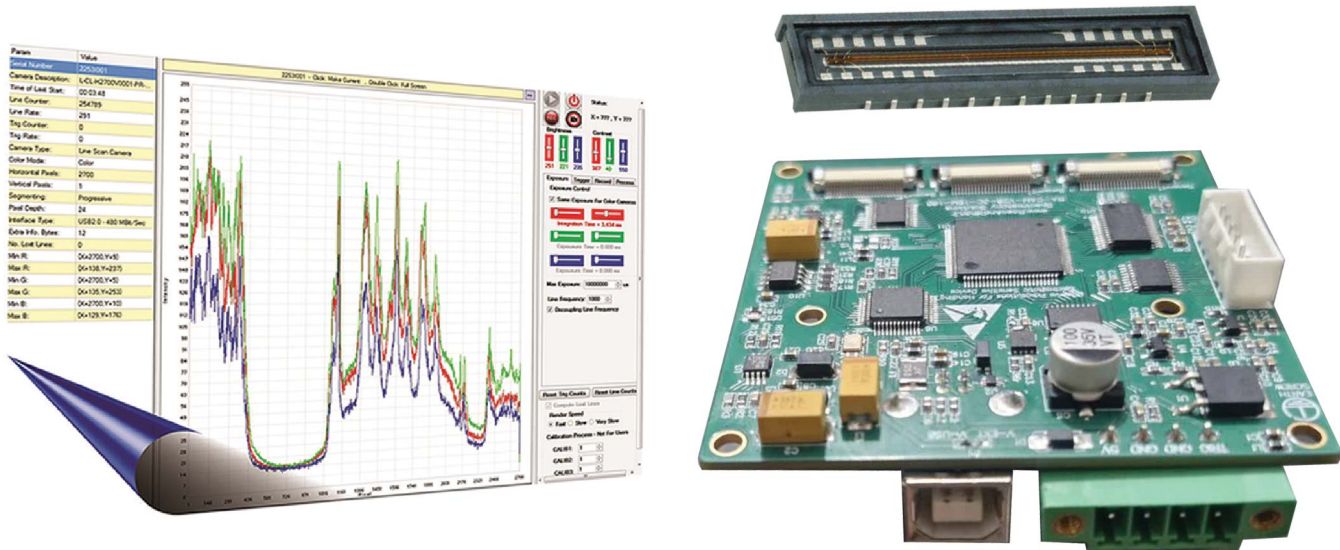
(دانش بنیان)

رسا اندیشان موج پرداز



طراح و سازنده انواع آشکارسازهای خطی و دوربین های تصویربرداری

- Robust & Reliable Hardware & Software Architecture
- Multi Interface Connectivity (USB2.0,USB3.0,Ethernet)
- Cross Platform – Linux & windows Application Support
- Plugin Based API and Sophisticated FlowGraph Structure
- VariousSDK(C#,C++,MATLAB,VB.Net,Python,LabVIEW)Included



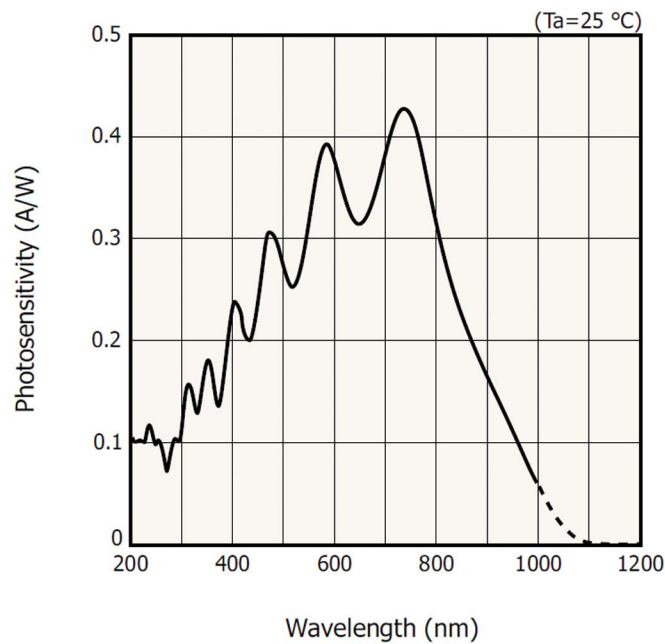
Overview

The RA-LSC-3CHS driver card is an electronic board capable of simultaneously converting the analog data from one, two, or three CCD, CMOS, or CIS sensors. This board can easily drive 2048 and 4096-pixel sensors from manufacturers such as Hamamatsu, Sony, Toshiba, and others. Instead of using three separate driver boards, each requiring a dedicated USB port, customers can use a single RA-LSC-3CHS board to acquire the digital data of three sensors simultaneously, with both software and hardware trigger capabilities directly on your computer.

Sample driver codes in C#, C++, Python, MATLAB, LABVIEW, and VB.Net enable users to quickly integrate and operate the board in their applications.

Application

RA-LSC-3CHS is Designed for Applications in Spectroscopy, Optics, Imaging, Biology, Industrial Process Control and General Laboratory Use.



Specification

Sensor Spec	
Sensor Type	CCD , CMOS , CIS
Spectral Response	200 - 1100 nm
CCD Pixel Size	7 μm x 200 μm
Pixel Height	200 μm
Pixel Width	7 μm
Effective Pixels	4096
Effective Length	4096 x 7 μm = 28.672 mm
Max Pixel Frequency	10 MHz
Max Line Rate	2385 Hz @ Free Running Mode
Min Exposure Time	10 μs
Max Exposure Time	14 Min
Exposure Resolution	1 μs
Pixel Color Depth	16 bit - 65536 Counts
Brightness Coefficient	-/+ 300 mV - 512 Analog Steps
Contrast Coefficient	64V/V - 64 Analog Steps
Triggering Spec	
Trigger Signal	TTL 5 V and 3.3 V
Trigger Mode	Free Running, Software Trigger, Hardware Trigger
Hardware Trig Polarity	Rising Edge, Falling Edge, Both Edges, High Level, Low Level
Trigger Factor	0 To 65535
Exposure Mode in Trig	Up to 4 Different Modes
Max Trigger Rate	1192 Hz
Min Trigger Pulse Length	33 ns
Trigger Delay	0 to 16 Min - in 1 μs Steps
General Spec	
Interface	High Speed USB 2.0 (480 Mbit/s)
Weight PCB Dimension	42 gr 80 mm x 80 mm
Temperature Range	- 40 to + 85 ($^{\circ}\text{C}$)

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