AX92350 NEW

Real-Time Vision I/O Card
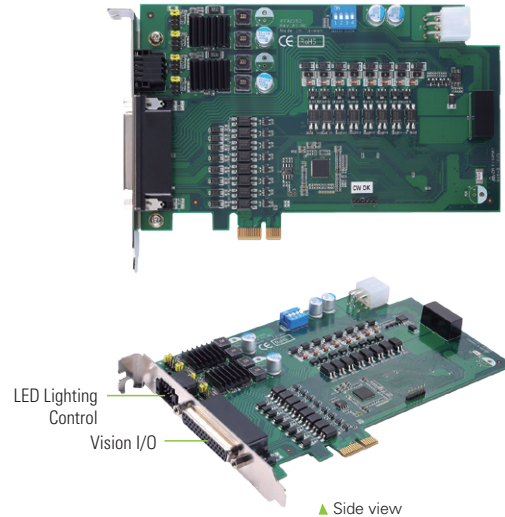
Features

- Integrated vision I/O
  - 4-CH trigger input
  - 4-CH or 8-CH trigger output
  - 4-CH LED lighting control (LED trigger output channels are defined by software settings)
  - 1-CH quadrature encoder input
  - 8-CH isolated DI, 8 CH isolated DO
  - 1-CH auto measurement function
- Programmable interrupt functions
- PCI Express x1 compliant
- Flexible design for vision inspection

Introduction

The AX92350 integrates various I/O features for machine vision applications, including trigger input and output with microsecond-scale real-time control, an auto measurement timer, as well as LED lighting control with dimming support. It also provides an encoder input function suited for conveyor applications in factory automation. The AX92350 can fit in the PCI Express slot of any vision control system to simplify deployment and maintenance of your machine vision platform.

LED Lighting Control
Vision I/O

▲ Side view

Specifications

Isolated Digital Input

Channels	8-CH
Type	Sink/Source
Input Voltage	On (Logic 1): 10 to 30 VDC or dry contact Off (Logic 0): 0 to 3 VDC
Impedance	7.5KΩ

Isolated Digital Output

Channels	8-CH
Output type	Sink, open collector
Supply voltage	5 to 30 VDC
Sink current	Max. 200 mA per channel

Isolated Trigger Input

Channels	4-CH
Type	Sink
Input range	On (Logic 1): 3 to 30 VDC Off (Logic 0): 0 to 2 VDC
Response Time	1us (from trigger input to trigger output)
Input Filter	Programmable de-bounce filter

Isolated Encoder Input

Channels	1-CH 16-bit incremental quadrature encoder input (A/B/Z)
Type	Differential, single-ended
Counter Mode	x4
Frequency Input	Max. 1MHz

Isolated Trigger Output

Channels	4-CH or 8-CH
Output Voltage	12 VDC
Output Impedance	1KΩ
Response Time	1us (from trigger input to trigger output)
Configuration	Derived from 4CH trigger input or encoder input. Can set the pulse delay time and duration time Trigger output channel 4,5,6,7 can only be selected either for trigger output or for LED lighting control
Auto Measurement	Timer that measures response interval between trigger input and trigger output

Interrupt

Sources	Two interrupt sources from DI, trigger input, encoder Z phase and encoder check pointer

LED Lighting Control

Channels	4-CH
Output Voltage	24 VDC, Max. 0.5A per channel
Output Current	Each channel can be set 100mA/250mA/350mA/500mA output by jumper, support dimming control
Mode	Trigger mode
External Power Supply Connector	6-pin ATX 2x3 connector for connection to 12V external power supply when LED power consumption exceeds 24V @500mA
Connector	4-CH LED lighting control via a 8 pin terminal connector

General Specifications

Bus Type	PCI Express x1
I/O Connector	D-sub 44-pin female connector
Isolation Voltage	1000 VDC
Power Requirements	50mA @ +3.3V (Max.) 220mA @ +12V (Max.) Note: Excluding the power consumption of 24V LEDs
Dimensions	168 x 107 mm
Board ID	Yes, 4-bit
Operating Temperature	0°C to +60°C (32°F to +140°F) with air flow
Storage Temperature	-20°C to +80°C (-4°F to +176°F)
Humidity	5 to 95% RH, non-condensing

Software Support

EOS Support	Windows® 7/Windows® 10 (32/64bit)
Software Compatibility	C#, C/C++, Visual Basic

Ordering Information

AX92350 (P/N: E392350100)	Vision I/O card
Vision Power Cable (P/N: 59492350700E)	4P 4.2/6P 4.2, L=10 cm (only be used with IPC962/IPC964)

Accessories

5A244AP1200E	44-pin DIN-rail terminal board DM44-AP12
594DM443500E	44-pin D-SUB cable, L=1m WHDM44/1.0-6954
594DM443510E	44-pin D-SUB cable, L=2m WHDM44/2.0-6954
594DM443520E	44-pin D-SUB cable, L=3m WHDM44/3.0-6954

*Specifications and certifications are based on options and may vary.

Packing list

Standard

User's manual, utility, CD and I/O bracket, CN-terminal block 4 x 2

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Axiomtek](#):
  [AX92350 Vision I/O Card](#)