MAVIS®

1394a Series IM30/IM100

Monochrome Industry CMOS Cameras

Preliminary

Digital IEEE1394 video output
Progressive-scan for on-the-fly applications
Acquisition speed up to 100fps in full resolution
Build-in 8MB memory buffer
Flexible electric exposure control

✓ RoHS

Robust external trigger I/O interface supported
Free SDK API for VC, VB, BCB and VC.NET
Interface sample programs for eVision, MIL, IMAQ

Introduction

The MAVIS is a new vision product line of ICP DAS, designed for industrial machine vision applications. The MAVIS IM series is designed to meet IEEE 1394 standards , while offering industry leading VGA resolution, high-performance frame rates, and a competitive price point! The Mavis IM30 offers 30fps for low-cost progressive-scan inspection applications. The Mavis IM100 can offer 100fps, in full resolution for advanced high-speed inspection applications.
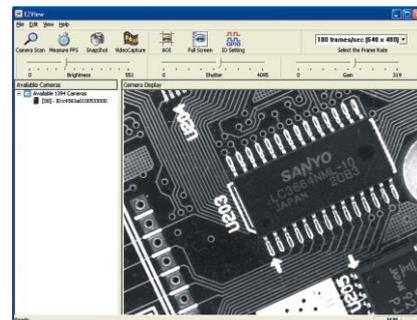
Software Supported

In continuing to promote the ICP DAS standard, for free and open product architecture, the Mavis systems will support the majority of popular video drivers, utilities, APIs and interfaces, free of charge! ICP DAS firmly believes in the freedom of choice for consumer software support, and looks to offer the utmost flexibility, in terms of research and development!

▶ Windows 2000/XP driver
▶ NI-IMAQ-1394 compatible

Free ICP DAS Utility

EZView

Free API supported

▶ Microsoft Visual C++
▶ Microsoft Visual Basic
▶ Microsoft Boland C++ Builder
▶ Microsoft VC.NET

Optional Accessories

ICP DAS offers three additional accessories, to further enhance the performance of your high-speed AOI inspection system!

▶ ICP DAS Dual IEEE 1394 host controller PCI interface card. Capable of supporting simultaneous dual port data transmission at rates of 400Mbps

▶ ICP DAS Optimized IEEE 1394 cable sets and Repeater.

Target Applications

▶ Semiconductor
▶ Component inspection
▶ Manufacturing quality control
▶ Food and beverage inspection
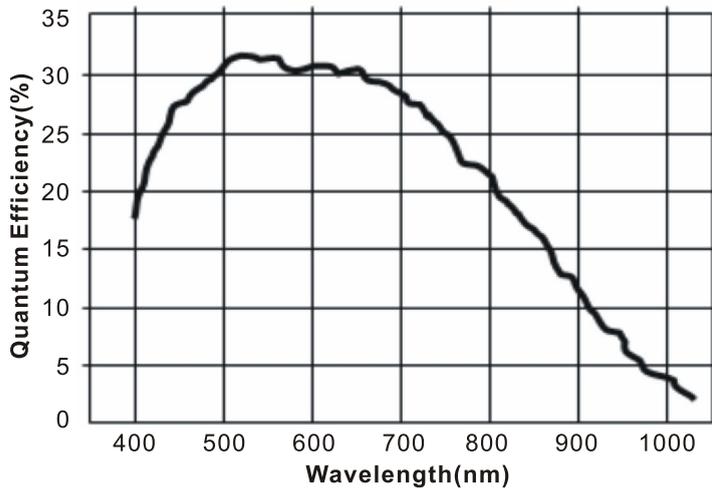▶ Microscopy and medical imaging
▶ Biometrics

ICP DAS CO., LTD.

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IM Series Camera Specification

Item	IM30	IM100
Image sensor	1/2" CMOS Sensor Micron MT9V403, Pixel size: 9.9um x 9.9um	
Video output pixels	640(H) x 480(V)	
Gain control	0 ~ 12dB setting via communication command	
Power supply	+12VDC normal (Supply via 1394 cable)	
Power consumption	Max. ~ 1.7W at 12V	
Acquisition mode	Free Run (exposure time programmable), External random trigger	
Connector Interface	6-Pin IEEE 1394 connector(for video and power) 10-Pin GPIO connector (Sam Woo SN series)	
GPIO connector	TTL level with 2 input, 4 output and one +5VDC output	
Video mode	Initial mode: 640 x 480 at 30fps Scalable mode: by AOI	Initial mode: 640 x 480 at 100fps Scalable mode: by AOI
Protocol	IEEE 1394a version. 1.31 (transfer speed 400Mbps)	
Test image	Gray value internal test pattern generated	
Exposure Time	Programmable via IEEE 1394 bus	
Gain and Brightness	Programmable via IEEE 1394 bus	
EMC condition	CE/FCC	
Dimension	72.5mm (H) x 49mm(W) x 36.7mm(D)	
Weight	120g	
Lens Adaptor	C/CS Mount	

Spectral Response

Connection Interface

IEEE1394
GPIO

Ordering Information

Model No.	Product Description
MAVIS IM30	640 x 480, Monochrome, 30fps, 1394 Camera (Lens not included)
MAVIS Im100	640 x 480, Monochrome, 100fps, High-Speed 1394 Camera (Lens not included)

Optional Accessory

Model No.	Product Description
IOI-4601-21	Dual 1394 Host Controller (TI Chipset) PCI Interface Card
1394latch-45	6P-6P 1394 Latch Cable (L:4.5m)
Repeater	1394 Repeater (1 Port to 1Port)