

ICAM-7000 Series

Smart Camera



Features

- Up to 5.0MP resolution with advanced image preprocessing (e.g. white balance, color debayering, and denoising)
- IP67 rating ultra-small form factor (93 x 63 x 40.5 mm)
- High performance multi-core processor (Intel® ATOM® Processor E3930, 1.30 GHz) and FPGA heterogeneous computing

Introduction

Advantech ICAM-7000 series is a fully integrated compact vision system that has been specifically designed for industrial automation. Advantech ICAM-7000 series features an Intel® Atom™ E3930 1.30 GHz processor suitable for customized algorithms and a FPGA for image preprocessing for advanced imaging. With CAMNavi SDK included, GenTL support developers can easily connect their image acquisition devices to a machine vision software library. ICAM-7000 features 1.3MP 54 fps global shutter sensor and 5MP 14 fps rolling shutter sensor respectively. PWM lighting control support benefits developers by integrating external lighting and providing optimized optical settings. IP67-rated design enables ICAM-7000 series to operate in the harshest environments. ICAM-7000 series is flexible, offers high integration, and has a rugged design that gives developers a customizable smart camera solution for a variety of machine vision applications.

Specifications

▪ Image Sensor	1.3MP@54fps, Global Shutter, C-mount , Monochrome/Color 5.0MP@14fps, Rolling Shutter, C-mount , Monochrome/Color
▪ Processor	INTEL E3930, Cyclone V 5CGTD5 4GB
▪ Display	DP (USB Type C Connector)
▪ USB	USB 2.0 (USB Type C Connector)
▪ Digital I/O	2 x Isolated Inputs, 2 x Outputs
▪ Power Input	12 ~ 24V _{DC}
▪ Environment/Certification	0 ~ 50° C, 5Grms, CE/FCC Class A /KCC, IP67
▪ Sensor Size	1.3MP (AR0134): 1/3" 5.0MP (MT9P031): 1/2.5"
▪ RAM/Storage	4GB LPDDR4 (Single Channel) /64G eMMC
▪ LAN	1 x 1000BASE-
▪ Synchronization	Hardware Trigger / Software Trigger / Free-run
▪ Lighting Control	PWM x 1
▪ Dimensions	95mm (W) x 63mm (H) x 40.5mm (D)
▪ Software/SDK	OS: Windows 10 IoT 1809 CAMNavi SDK

Ordering information

Smart Camera

▪ ICAM-7100	1.3MP mono smart camera
▪ ICAM-7500	5.0MP mono smart camera
▪ ICAM-7110	1.3MP color smart camera
▪ ICAM-7510	5.0MP color smart camera

Terminal box

▪ ICAM-T100	Lite vision terminal box
▪ ICAM-T200	Full version terminal box