EOS-4000

2-CH Camera Link (PoCL) Embedded Vision System with 3rd Generation Intel® Core™ i5/i7 Processor

Introduction

ADLINK's EOS-4000 is a rugged, compact embedded vision system, with 3rd Generation Intel® Core™ i5/i7 processor, dual independent PoCL (power over Camera Link) ports with data transfer up to 2.56 Gb/s, and pixel clock rates up to 85 MHz for high speed capture of large images. Computing power and connectivity are significantly enhanced, with minimal footprint.

The EOS-4000 supports a 2-CH PoCL Camera Link® base configuration, reducing cabling burdens and eliminating the need for external power adapters. In addition, the EOS-4000 supports 64-bit memory addressing, benefiting large address space vision applications.

The EOS-4000's rich I/O capability includes trigger and encoder input and two independent RS-232 serial communication ports, reducing host computer loading. 64 isolated digital I/O connectors, digital filter, dual storage, internal USB port, and 1 kbit programmable EEPROM all ideally equip the EOS-4000 to integrate, deploy, and manage copy protection or authentication of software licenses for system development, further accelerating time to market.

Combining increased computing power with multi-channel connectivity and a ready-to-deploy application platform, the EOS-4000 delivers embedded vision ideally suited for high-speed and large image machine vision applications.

Features

- **Compact, rugged system design**
- **Embedded 3rd Gen Intel® Core i5/i7 Quad Core CPU**
- **2-CH PoCL, base Camera Link® configuration**
- **One internal USB port and 1kbit EEPROM**
- **RAID system (Dual SATA interface)**
- **64-CH isolation DI/O with digital filter**
- **Support for wall and DIN rail mounting (optional)**
- **Hardware monitoring of temperature, voltage, and watchdog timer**

Applications

- **Industrial automation**
- **Robot guidance**
- **3D vision**
- **Medical imaging**

Software Support

OS Information

- Windows® 7, Embedded Standard 7

Specifications

CPU	Intel® Core™ i7-3610QE, i5-3610ME
Chipset	Intel® QM67 Express
System Memory	DDR3 SODIM x2, up to 16 GB
Video	VGA+DVI-D output by DVI-I connector, up to QXGA (2048 x 1536) resolution
Ethernet	2x GbE port
USB	4x external USB 2.0, 2x external USB 3.0, 1 x internal USB 2.0
EEPROM size	1 kbit programmable EEPROM
COM Ports	Two software-programmable RS-232/422/485 (COM1 & COM2), two RS-232 (COM3 & COM4)
Keyboard/Mouse	PS/2 type mini-DIN connectors
Camera Interface	2-CH Camera Link base configuration, up to 85 MHz
Digital I/O	32 DI, 32 DO COS interrupt for all digital input 2.5 kV isolation protection Configurable Digital Filter (0.25 μs-131 ms)
Trigger I/O	2 trigger input, 1 encoder input
Weight	3 kg (6.6 lbs)
Mounting	Wall and DIN rail mounting (optional)
Power Supply	DC: 10 to 30 VDC, ATX mode
Operating Temp.	0°C to 55°C (32°F to 122°F)
Humidity	0% to 90%
Dimensions	230 (W) x 206 (D) x 82 (H) mm (9 x 8.3 x 3.2 in.)
Power Consumption	110 W (with 4 GB DDRAM and 4 GB CFAST)
Storage	One CFAST slot, two 2.5" SATA interfaces
Random Vibration	Operating, 5 Grms, 5-500 Hz, 3 axes (w/CFAST or SSD)
Safety Compliance	CE/FCC, RoHS

Ordering Information

- **EOS-4000/M4G**
  2-CH PoCL embedded vision system equipped with Intel® Core™ i5-3610ME 2.7 GHz processor and 4 GB RAM
- **EOS-4000/M4G/HDD500G**
  2-CH PoCL embedded vision system equipped with Intel® Core™ i5-3610ME 2.7 GHz processor and 4 GB RAM , and 500 GB HDD
- **EOS-4010/M4G**
  2-CH PoCL embedded vision system equipped with Intel® Core™ i7-3610QE 2.3 GHz processor and 4 GB RAM
- **EOS-4010/M4G/HDD500G**
  2-CH PoCL embedded vision system equipped with Intel® Core™ i7-3610QE 2.3 GHz processor and 4 GB RAM, and 500 GB HDD

Optional Accessories

- **32 GB SSD option**
  Factory-installation of 32 GB SATA solid state drive (0 to 70°C)
- **4 GB CFAST option**
  Factory-installed 4 GB CFAST card (0 to 70°C)
- **150 W AC adapter**
  150 W industrial-grade AC adapter (-20 to 70°C)
- **DIN rail kit**
  DIN rail mount kit

Cabling

- COM port cable
  DSUB 62-pin male to 4 DSUB 9-pin male cable

EOS-1200

4-CH GigE Vision Embedded Vision System with 2nd/3rd Generation Intel® Core™ i5/i7 Processor

Introduction

ADLINK's EOS-1200 is a rugged and compact embedded vision system equipped with the 2nd/3rd Generation Intel® Core™ i5/i7 processor. Four independent PoE (power over Ethernet) ports with data transfer rates up to 4.0 Gb/s offer greatly enhanced computing power and connectivity with minimal footprint.

The EOS-1200 supports not only PoE (power over Ethernet), combining power and signal supply into a single cable, but also IEEE 1588 (precise time protocol), enabling synchronization with multicamera acquisition. With the EOS-1200's significant cable reduction system installation is simplified, and maintenance burdens and total cost of ownership are notably lowered.

The EOS-1200 supports a rich I/O capability, including four serial ports, two USB 3.0 ports, 32 PNP/NPN isolated digital I/Os, dual storage, an internal USB port, and 1 Kbit programmable EEPROM, which make EOS-1200 ideal to integrate, deploy, and manage copy protection or authentication of software licenses for system development, and further accelerate time to market.

Combining more powerful computing with multi-channel connectivity and a ready-to-deploy application platform, the EOS-1200 delivers embedded vision ideally suited to machine vision applications.

Features

- **Compact and rugged system design**
- **Embedded Intel® Core i5/i7 Quad Core CPU**
- **Up to 4-CH Gigabit PoE (power over Ethernet), 4.0 Gb/s**
- **Support for IEEE 1588, PTP technology**
- **Support for two USB 3.0 ports**
- **Support for wall and DIN rail mounting (optional)**
- **One internal USB port and 1Kbit EEPROM**
- **RAID system (Dual SATA interface)**
- **32 PNP/NPN isolated digital I/O**

Software Support

- OS Information
  - Windows® 8/7/XP/XP Embedded/Embedded Standard 7

Specifications

CPU	Intel® Core™ i5-2510 3.1 GHz / Intel® Core™ i7-2710 3.0 GHz / Intel® Core™ i7-3610 3.3 GHz
System Memory	Up to 8 GB DDR3
Camera Interface	4-CH Gigabit power over Ethernet IEEE 802.3af compliant, total max. power output 32 W
Chipset	Intel® QM67 Express chipsets
VGA	VGA+DVI-D output by DVI-I connector, up to QXGA (2048 x 1536) resolution
USB	Four USB 2.0 ports, two USB 3.0 ports
Audio	AC97, mic in/speaker out
COM Ports	Two software-programmable RS-232/422/485 (COM1 & COM2), two RS-232 (COM3 & COM4)
Digital I/O (Option)	16-CH isolated digital input and output, PNP/NPN type
Keyboard/Mouse	PS/2 type mini-DIN connectors
Power Supply	DC: 10 to 30 V_{DC}, ATX mode
Operating Temp.	0°C to +55°C (32°F to 131°F)
Humidity	0% to 90%
Dimensions	230 (W) x 206 (D) x 82 (H) mm (9" x 8.3" x 3.2")
Power Consumption	110 W (with 4 GB DDRAM and 4 GB CFAST)
Storage	One CFAST slot, two 2.5" SATA interfaces
Random Vibration	Operating, 5 Grms, 5-500 Hz, 3 axes (w/CFAST)
Safety compliance	CE/FCC, RoHS

Ordering Information

- **EOS-1220/M4G**
  4-CH GigE Vision embedded vision system equipped with 3rd generation Intel® Core™ i7-3610 3.3 GHz quad core processor and 4 GB RAM
- **EOS-1200/M4G**
  4-CH GigE Vision embedded vision system equipped with 2nd generation Intel® Core™ i7-2710 3.0 GHz quad core processor and 4 GB RAM
- **EOS-1210/M2G**
  4-CH GigE Vision embedded vision system equipped with 2nd generation Intel® Core™ i5-2510 3.1 GHz dual core processor and 2 GB RAM
- **EOS-1210/M2G/HDD320G**
  4-CH GigE Vision embedded vision system equipped with 2nd generation Intel® Core™ i5-2510 3.1 GHz dual core processor, 2 GB RAM, and 320 G HDD

Optional Accessories

- **4 GB CFAST option**
  Factory-installed 4 GB CFAST card
- **150 W AC adapter**
  150 W industrial-grade AC adapter
- **DIN rail kit**
  DIN rail mount kit

Cabling

- COM port cable
  DSUB 62-pin male to 4 DSUB 9-pin male cable