eBOX671-885-FL-ECM
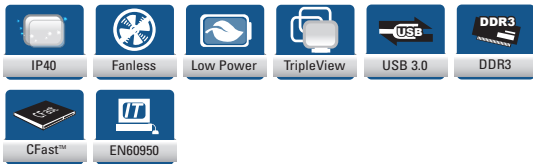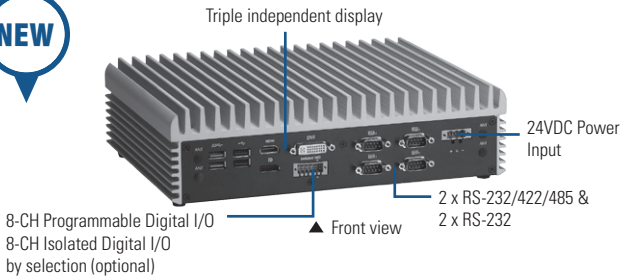
Fanless EtherCAT Master Controller with LGA1150 Socket 4th Generation Intel® Core™ i7/i5/i3 & Celeron® Processors

NEW

Triple independent display

24VDC Power Input

8-CH Programmable Digital I/O
8-CH Isolated Digital I/O
by selection (optional)

▲ Front view

2 x RS-232/422/485 &
2 x RS-232

| IP40 | Fanless | Low Power | TripleView | USB 3.0 | DDR3 |
| CFast™ | EN60950 |

Features

- LGA1150 socket 4th generation Intel® Core™ i7/i5/i3 & Celeron® processors (Haswell and Haswell Refresh) with Intel® Q87
- Fanless operation design with 4-CH GbE PoE
- Two 2.5" SATA HDD drive bay, mSATA and CFast™ slot
- Two internal PCI Express Mini Card slots and one SIM Card slot
- Supports HDMI, DVI-I and DisplayPort for triple independent display
- Supports RAID 0 & 1, Jumbo Frame (9.5K) WoL, PXE and Teaming

LGA1150 Socket Intel® Core™ i7/i5/i3 & Celeron® processors   Easy maintenance design

2 x 2.5" HDD, CFast & mSATA supported

4 x PoE GbE LAN

6 x USB 3.0

▲ Rear view

System Indicator	1 x blue LED for system power 1 x orange LED for HDD active
Power Supply	DC Input 24V
Operating Temperature	-20°C ~ +50°C (-4°F ~ +122°F) (with W.T. SSD or CFast™, CPU TDP 35W)
Storage Temperature	-40°C ~ +80°C (-40°F ~ +176°F)
Humidity	10% ~ 90%, non-condensing
Dimensions	280 mm (11.02") (W) x 210 mm (8.27") (D) x 76 mm (2.99") (H)
Weight (net/gross)	4.31 kg (9.5 lb)/ 3.2 kg (7.05 lb)
Certificate	CE

Introduction

The eBOX671-885-FL-ECM EtherCAT controller is verified with IntervalZero EtherCAT Master middleware KingStar which is based on EtherCAT Master Stack (eg. Acontis) and IntervalZero real-time extension RTX. The high performance Intel® CoreTM-based EtherCAT master controller handles high-level machine control tasks in factory automation industry.

Acontis EC-Master supports standard protocols CoE, SoE, AoE and VoE as well as Distributed Clocks. IntervalZero Windows real-time extension RTX with a separate real-time scheduler transforms Windows® the general-purpose operating system into a fully functional RTOS that runs on multi-core hardware, delivering deterministic time control to allow Master controller and Slave device communicating with cycle time of 250 μs.
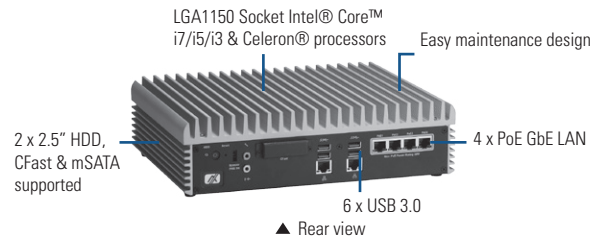
In a practice of robotic arm, IP camera is widely used as eye to guide robotic arm to pick up object on conveyor. The eBOX671-885-FL-ECM with 4 GbE PoE is an ideal choice.

Specifications

Standard Color	Silver-Black
Construction	Aluminum extrusion and heavy-duty steel, IP40
CPU	4th generation Intel® Core™ i7/i5/i3 & Celeron® processors with TDP max. up to 45W
System Memory	8 GB recommended
Chipset	Intel® Q87
BIOS	AMI
System I/O Outlet	1 x EtherCAT port (Intel® i210) 1 x GbE LAN port (Intel® i210) 4 x 10/100/1000Mbps Power over Ethernet, PoE - 4 ports full-load, IEEE802.3af Class 2 (7Watt) - 2 ports full-load, IEEE802.3af Class 3 (15.4Watt) - 1 ports full-load, IEEE802.3at Class 4 (30Watt) 2 x RS-232/422/485 & 2 x RS-232 8 channel programmable DI/DO 8 isolated DI/DO (4 IN & 4 OUT) (optional) 6 x USB 3.0 2 x USB 2.0 1 x Audio (MIC-in/Line-out) 1 x DVI-I 1 x HDMI 1 x DisplayPort 1 x 24VDC Power input connector 1 x power switch 1 x Reset switch 1 x Remote power switch 3 x Antenna opening
Watchdog Timer	255 levels, 1 ~ 255 sec.
Storage	2 x 2.5" SATA HDD bay, max. height 9.5 mm (RAID 0 & 1 supported) 1 x CFast™ (front access) 2 x mSATA
Expansion Interface	2 x Full-size PCI Express Mini Card slot (USB+PCIe signal) 1 x SIM Card slot

Verified with Software

Operating System	Windows® Embedded Standard 7 32 bit/64 bit
Windows Extension	IntervalZero Windows real-time extension RTX2012/RTX64
Test Middleware	IntervalZero KingStarl O 32 bit/KingStar Motion 64 bit
EtherCAT Master	Acontis EtherCAT Master stack 32 bit, Master stack 64 bit
EtherCAT Configurator	IntervalZero EtherCAT Configurator

Ordering Information

Standard

eBox671-885-FL-ECM-DC	Fanless EtherCAT master controller with Intel® Core™ i7/i5/i3 & Celeron® processors, Intel® Q87, dual HDD, 4 PoE, 2 GbE LANs, 8 USB, audio, 4 COM, 8-CH TTL digital I/O and 24VDC

Dimensions

280

210