

AloT Solution

- Machine Vision
- Motion Control
- Al Solution
- HMI



6

www.efcotec.com





EFCO Eagle Eyes Intelligent Embedded Systems for AIoT Applications

Fanless | Scalable | Extendable

EFCO Eagle Eyes is a next-generation intelligent system for a variety of embedded applications. Equipped with state-of-the-art 6th/7th Generation Intel® Core™ i3/i5/i7 processor, Eagle Eyes supports up to twelve independent Gigabit PoE+ IEEE802.3at IP cameras.

Eagle Eyes is equipped with a proprietary artificial intelligence algorithm called eKit. The special software along with an ARM chip integrated in the device monitors the system parameters and evaluates its measured values. The Dynamic Display Moule (DDM), a small OLED display on the front of the system, informs users about the device status and displays the measured values and/or error messages. With an API, user software can then be used to access the ARM controller or the display.

The compact design is ideal for machine vision, automation and space-constrained applications. The hardware design is also optimized so that customers do not need to purchase additional add-on cards for isolated DIO or PoE functions, design their own remote switches or power ignition system.

There are 6 different I/O module (IOM) options which can be added to fulfill customers' needs without the extra effort and cost of customization. With the development of Industrial Internet of Things (IIoT), it opens up even more diverse possibilities for applications.

Applications



EFCO Smart Service - eKit AI Core System with Dynamic Display Module

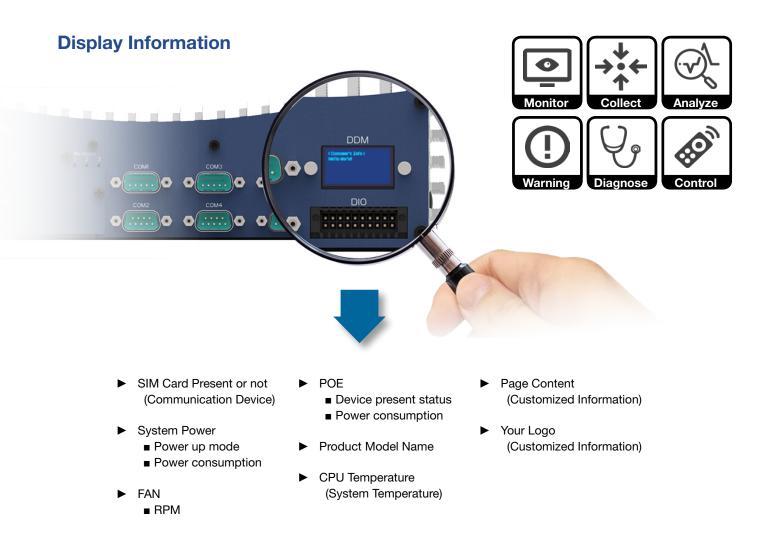


- Dynamic and real-time monitoring of system behavior
- System data collection
- Data analysis
- Predict behavior, system behavior prediction
- Prevent accident, system sudden accident diagnostic and prevention
- Warning for advance troubleshooting notification
- Proven reliability and system stability

Reliability is critical in many applications, EFCO is incorporating artificial intelligence into its devices to detect problems and trigger preventative maintenance.

Based on proprietary AI algorithms, Eagle Eyes' intelligent eKit is a software-based tool that collects data from the device and performs dynamic, real-time monitoring of system behavior. Its Dynamic Display Module (DDM) is a key feature of Eagle Eyes and displays system information such as CPU temperature, power consumption, RTC battery voltage, DC voltage, hardware health, and PoE status, as well as customized customer information. The eKit ensures that the system maintains stable operation at all times and provides advanced warning if proactive trouble-shooting is required. This prevents unpredictable losses due to sudden, or unexpected operating failures.

EFCO provides DMCT (Dynamic Monitoring Control Tool), one UI for customers to monitor the system status. For self-development applications, EFCO also provides API and Library (DMCI and DDMI).



Features

- Remote on/off power switch design
- Power ignition control design
- Software control USB devices without plugging and unplugging USB devices
- USB security latch reserved designed for system security
- Option for isolated DIO or GPIO design
- Easy maintenance for RTC battery tray, push-push SIM slot and swappable 2.5" HDD
- Flexible installation method: desktop, wall mount, DIN rail
- RAID 0/1/5 support
- Power Protection
 - Wide DC- input voltage range
 - Over-voltage/ Under-voltage/ Over-Current protection
 - Surge protection
 - Earth ground protection



Eagle Eyes-AIH

6th/7th Gen Intel® Core[™] S Series & Intel® Xeon® E3 (FCLGA1151 Socket) Fanless Box Computer

- 1x IOM support
- 2x RJ45 GbE
- 4x RJ45 GbE/PoE+
- 6x USB 3.0
- 16-bit GPIO / 8-bit isolated DI, 8-bit isolated DO
- 4x RS-232, 2x RS-232/422/485
- 3x independent displays, 2x DP, 1x DVI, 1x VGA (3 of 4)
- 3x Mini-PCle/mSATA
- 3x SIM slot
- 3x 2.5" internal SATA drive bay
- RAID 0/1/5 support



Eagle Eyes-AIH-EP

6th/7th Gen Intel® Core[™] S Series & Intel® Xeon® E3 (FCLGA1151 Socket) Box Computer (Optional Fanless)

- 2x IOM support
- 2x RJ45 GbE
- 4x RJ45 GbE/ PoE+
- 6x USB 3.0
- 16-bit GPIO / 8-bit isolated DI, 8-bit isolated DO
- 4x RS-232, 2x RS-232/422/485
- 3x independent displays, 2x DP, 1x DVI, 1x VGA (3 of 4)
- 3x Mini-PCle/mSATA
- 3x SIM slot
- 3x 2.5" internal SATA drive bay
- RAID 0/1/5 support
- AIH-EP1 PCle x16 + PCl AIH-EP2 — PCle x16 + PCle x4 AIH-EP3 — 2x PCl

Eagle Eyes-AIM

6th/7th Gen Intel® Core™ U Series Fanless Box Computer

- 4x RJ45 GbE / PoE+
- 4x USB 3.0
- 16-bit GPIO / 8-bit isolated DI, 8-bit isolated DO
- 2x RS-232, 2x RS-232/422/485
- 3x independent displays, 2x DP, 1x VGA
- 2x mini-PCle
- 2x SIM slot
- 1x M.2 socket M Key 2242
- 1x 2.5" internal SATA drive bay



Eagle Eyes-AIHD/AIHDP

6th/7th Gen Intel® Core[™] S Series & Intel® Xeon® E3 (FCLGA1151 Socket) DIN Rail Box Computer

- 6x RJ45 GbE (AIHD), 2x RJ45 GbE, 4x RJ45 GbE/PoE+ (AIHDP)
- 6x USB 3.0
- 32-bit / 16-bit isolated DI, 16-bit isolated DO
- 1x RS-232, 1x RS-232/422/485
- 3x independent displays, 2x DP, 1x DVI, 1x VGA (3 of 4)
- 3x mini-PCIe/mSATA
- 3x SIM slot
- 3x 2.5" internal SATA drive bay
- RAID 0/1/5 support





Eagle Eyes-AIHD-P4E/AIHDP-P4E

6th/7th Gen Intel® Core[™] S Series & Intel® Xeon® E3 (FCLGA1151 Socket) DIN Rail Box Computer

- 6x RJ45 GbE (AIHD-P4E), 2x RJ45 GbE, 4x RJ45 GbE/PoE+ (AIHDP-P4E)
- 6x USB 3.0
- 32-bit GPIO / 16-bit isolated DI, 16-bit isolated DO
- 1x RS-232, 1x RS-232/422/485
- 3x independent displays, 2x DP, 1x DVI, 1x VGA (3 of 4)
- 3x mini-PCle/mSATA
- 3x SIM Slot
- 3x 2.5" internal SATA
- RAID 0/1/5 support
- AIHD-P4E1: 1x PCIe x16 & 3x PCI



About EFCO

Established in 1992, EFCO is a leading provider of embedded computer platforms with a demonstrated history of delivering solutions matched specifically to individual customer requirements. Our industrial-grade products cover a variety of vertical market solutions. These include Wide-temperature Rugged Fanless Computers, Multi-touch Panel PCs, Casino Gaming Solutions and IoT Nodes. We also offer COMe carriers board design service, OEM/ODM design and manufacturing services, and Computer on Module (SOM) thermal solutions. EFCO is headquartered in Taipei Taiwan, with offices in the USA, China, UK and Germany.

EFCO has earned a reputation for quality control and reliability on product design and service. EFCO has successfully deployed customers' solutions into Gaming, Digital Signage, Smart Factory, Machine Vision, In-Vehicle Transportation, Health Care, Security Control and Automation.

EFCO has close partnerships with Intel® and AMD® to provide customers seamless support and time-to-market solution. EFCO is also a member of AIA, EtherCAT, and AGM. By participating in industrial organizations, and staying current on AIoT trends, EFCO aims to build integrated Application-Ready Platforms to provide various solutions, as well as contribute its insights to the market.

Flexible and Collaborative Manufacturing Services

With more than 26 years experience, EFCO offers turnkey manufacturing services with state-of-the-art production equipment for both PCB assembly and complete system builds. EFCO utilizes its professional manufacturing process with customized designs in support of small/medium/large-volume and high-mix orders to achieve quick production ramp up and competitive ROI benefits. EFCO's in-house production center provides not only box-build services, but also Conformal Coating, Extended Temperature Screening and Burn-In services, etc. to ensure the best quality and product longevity.

International Quality Assurance Standards

EFCO is ISO 13485 and ISO 9001 certified, and its total quality management covers customer satisfaction, supplier management, product design and verification, manufacturing, and quality assurance. EFCO proudly offers our customers innovative products and services with the highest level of quality.

EverFine Group

Headquarters

10F-3, No. 270, Sec. 4, Chung Hsiao E. Rd., Taipei, 10694, Taiwan Tel: +886 2 2751-7192 info@efco.com.tw

Americas

2675 East Patrick Lane Suite #7, Las Vegas, NV 89120, USA Tel: +1-702-848-5320 sales-us@efcotec.com

EMEA

Ulrichsberger Str. 17 Haus G1, 94469 Deggendorf, Germany Tel: +49-991-2009298-0 sales@efcotec.de

UK & Ireland Tel: +44 0 7976 -155552 sales-uk@efcotec.com