ECU-4784

Intel® Haswell Core i7 Power & Energy Automation Computer with 8 x LAN, 10 x COM and 2 x Expansion Slots

Features

- TUV IEC 61850-3 and IEEE 1613 compliant for substation automation
- applications
- Intel Haswell Core i7 4650U 1.7GHz processor
- Supports Intel Active Management Technology(AMT)
- 2 x 2.5" SATA HDD , RAID (RAID 0 & RAID 1), Hot swap installation
- 1 x 10/100/1000 Base T RJ45 (Support AMT, Teaming Function, PXE)
- 7 x 10/100/1000 Base T RJ45 (Support Teaming Function, PXE)
- Security Protection: Trusted Platform Module
- Front or Rear wiring, programmable LED indicator
- Supports Redundant Display (DVI& VGA)
- Supports Redundant isolated power with wide AC/DC input range

Introduction

ECU-4784 series products are compliant with TUV IEC 61850-3 and IEEE 1613 certification, which can provide higher reliability and stability, suitable for any global P&E automationmarket and harsh environment. With high computing and high integration performance , ECU-4784 is target to Smart Substation station level 's Server application, Featuring a fanless design with high performance processor (Intel Haswell Core i7 4650U), the ECU-4784 comes with 10 isolated serial ports, 8 x LAN and 2 x Expansion Slots. ECU-4784 are easy to expand more kinds domain I/O by functional module to extend data collection variety and highly simplify monitoring for operation and maintenance.

Specifications

General

- **Certification**: CE, FCC class A, CCC, Electricity IV level for China (Compatible IEC 61850-3, IEEE 1613), UL
- **Dimensions (W x D x H)**: 440 x 280 x 88 mm
- **Enclosure**: SECC & Aluminum
- **Mounting**: 2U Rack mount
- **Power Requirements**: Supports Redundant power input
  Power 1: 100 ~ 240 V_{AC} or 100 ~ 240 V_{DC};
  Power 2: 100 ~ 240 V_{AC} or 100 ~ 240 V_{DC}
- **Weight**: 6.0 kg
- **OS Support**: Windows7, Windows8, Window server 2008 R2 (64bits)
- **System Design**: Fanless

System Hardware

- **CPU**: Intel Haswell Core i7 4650U 1.7GHz
- **Memory**: DDR3L 1.35V non-ECC 8G (Up to 16G by 2 Piece 8G)
- **Indicators**: LEDs for Power, HDD, Programmable LED, LAN (Active, Status) and Serial (Tx , Rx)
- **Storage**: 2x 2.5" SATA HDD(RAID 0,1); 1 x CFast socket
- **Display**: DB15 VGA connector, 1 x DVI
- **Watchdog Timer**: Programmable 256 levels time interval, from 1 to 255 seconds for each tier

Relay

- **Relay Output**: Form C
- **Contact**: 5 A @ 250 V_{AC}/5 A @ 30 V_{DC}
- **Channels**: 1

I/O Interface

- **Serial Ports**: 2 x RS-232 (DB-9 connectors) (Standard), 8 x RS-232/422/485 (Terminal Block) (Optional) 2000 V_{DC} isolation
- **Serial Port Speed**: RS-232: 50 ~ 115.2 kbps, RS-422/ RS-485: 50 ~ 921.6 kbps (Max.)
- **LAN**: 1 x 10/100/1000 Base T RJ45 ports (Supports AMT, Teaming Function, PXE) 7 x 10/100/1000 Base T RJ45 ports (Supports Teaming Function, PXE)
- **USB Ports**: 6 x USB, UHCI, Rev.2.0 Compliant 2 x Front, 3 x Rear and 1 x Internal
- **Expansion**: 2 Domain I/O Expansions (Each Expansion Slot supports 1 x PCIe and 2 x PCI Interface)

Environment

- **Storage Humidity**: 95% @ 40°C (non-condensing)
- **Operating Temperature**: IEC 60068-2-2 with 100% CPU/ I/O loading, 48 hrs -20~ 70°C (-4 ~ 158°F)
- **Operating Humidity**: 20 ~ 95% (non-condensing)
- **Shock Protection**: IEC 68 2-27 CFast®: 50 G half sine, 11 ms HDD: 20 G half sine, 11 ms
- **Vibration Protection**: IEC 60068-2-64 (Random 1 Oct./min, 1hr/axis.) CFast®: 2 Grms @ 5 ~ 500 Hz, HDD: 1 Grms @ 5 ~ 500 Hz

Ordering Information

- **ECU-4784-D55SAE**: Intel Core i7 1.7GHz, 8GB RAM, 8 x LAN,10 x COM, 2 x Slot Computer
- **ECU-4784-D56SAE**: Intel Core i7 1.7GHz, 16GB RAM, 8 x LAN, 10 x COM, 2 x Slot Computer
- **XECU-FSP150-1H35(*)**: FSP AC 100-240V 150W W/PFC (Note: For ECU-4784 Dual Power, by CTOS configuration center)

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