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

I/O Interface

LAN

• **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.) 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) 6 x USB, UHCI, Rev.2.0 Compliant

• **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 PCle and 2 x PCl

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)