

ECU-4784

Intel Xeon IEC-61850-3 Certified Power Automation Computers

NEW



Features

- Intel SkyLake Xeon E3 quad-core Processors
- DDR4 16G RAM with ECC (Up to 32G)
- Isolated 8 x LAN, 10 x Serial Port Communication Interfaces
- 220V_{AC/DC} Redundant Power Supply
- 48V Power for Selection
- 2 x IO Expansion Slots
- 2 x 2.5" SATA Interface, 1 x CFast Socket for Storage
- VGA & DVI Display Interface
- Programmable LEDs
- Intelligent Connectivity Diagnosis Management
- Remote Management
- Trusted Platform Module
- Virtualization Technology for Directed I/O

Introduction

The ECU-4784 series are TUV IEC 61850-3 and IEEE 1613-certified products that provide high reliability and stability for power automation applications. The fanless robust design, high CPU performance, flexible expansion, rich communication interfaces, and intelligent functions make the ECU-4784 series of industrial PCs suitable to serve as smart substations in harsh environments.

Specifications

General

- **Certification** CE, FCC, CCC, Electricity IV level for China, IEC-61850-3, IEEE-1613, UL, CB, LVD
- **Power Requirements** Redundant Power Supply
Power1: 100 ~ 240 V_{AC}, 100 ~ 240 V_{DC}
Power2: 100 ~ 240 V_{AC}, 100 ~ 240 V_{DC}
- **Power Consumption (Typical)** 35W
- **Operating System** Windows 7/8, Windows Server 2008 R2, WES7(WSP), Windows Server 2012R2, Windows Embedded 8 64-bit, Linux
- **Dimensions (W x D x H)** 440 x 280 x 88 mm
- **Enclosure** SECC and aluminum
- **Weight** 6.0 Kg
- **Mounting** 2U Rackmount
- **System Design** Fanless

System Hardware

- **CPU** Intel SkyLake Xeon E3-1505L Quad-core 2.0GHz
- **Memory** DDR4 1.2V ECC 16G (Up to 32G)
- **Indicators** LEDs for PWR1, PWR2, HDD, LAN (LINK, ACT), COM (TX, RX), Slot 1, and Slot 2, Programmable
- **Storage** 2 x 2.5" SATA Interface(RAID0,1,5)
1 x CFast socket
- **Display** 1 x DB15 VGA, 1 x DVI-D (Resolution: 1920 x 1080)
- **Watchdog Timer** Programmable 256 levels time interval, from 1 to 255 seconds for each tier
- **Relay** Relay Output Form C
Contact 5A @ 125V_{AC}/ 5A @ 30V_{DC}
Channel 1

Communication Interface

- **Serial Ports** 2 x RS-232 (DB9 connectors, Standard)
8 x RS-232/422/485 (Terminal Block)
2,500V isolation
- **Serial Port Speed** RS-232: 50 ~ 115.2 kbps
RS-422/485: 50 ~ 921.6 kbps (Max.)

- **LAN** 8 x 10/100/1000 Base-T RJ45 ports
(Supports teaming function, PXE, LAN1 supports AMT)
(All LAN ports support IEEE-1588)
- **USB** 4 x USB, UHCI, rev 2.0 compliant (3 x rear, 1 x internal)
2 x USB, UHCI, rev 3.0 compliant (2 x front)
- **Expansion** 2 x Domain I/O expansion slots (Each slot supports 1 x PCIe/ PCI interface)
- **Environment**
 - **Operating Temperature** -25 ~ 60°C with
50% CPU/ I/O loading, without 2D/3D, 24 hrs
0.7m/s air flow(SSD)
 - **Operating Humidity** 5 ~ 95% RH (non-condensing)
 - **Storage Humidity** 5 ~ 95% RH (non-condensing)
 - **Shock Protection** IEC 68 2-27 CFast®: 10 G half sine, 11 ms
 - **Vibration Protection** IEC 68 2-64 (Random 2Grms, 5-500Hz for SSD)

Ordering Information

- **ECU-4784-E56SAE** Intel SkyLake Xeon E3-1505L Quad-core 2.0GHz processor with ECC 16GB RAM, 8xLAN, 10xCOM, 2xExpansion slots
- **ECU-4784-E57SAE** Intel SkyLake Xeon E3-1505L Quad-core 2.0GHz processor with ECC 32GB RAM, 8xLAN, 10xCOM, 2xExpansion slots
- **XECU-FSP150-1H35 (*)** FSP AC/DC 100 ~ 240V, 150W, W/PFC
(Note: Dual power configuration is available upon request via Advantech CTOS)
- **9893SW0400E (*)** DC 36V ~ 72V module
(Note: A 48V power module is available upon request via Advantech CTOS)
- **2070015295 (*)** ECU-4784 Xeon Win7 Ult SP1 x64 Version 1.00.001 en-US
- **2070015296 (*)** ECU-4784 Xeon Win7 Ult SP1 x32 Version 1.00.001 en-US
- **20703WP7SS0000 (*)** ECU-4784 Xeon Win7 Pro SP1 x64 Version 1.00.001 en-US