# ECU-4784 XEON

## **Intel Xeon IEC-61850-3 Certified Power Automation Computers**



### **Features**

- Intel 9th Gen CoffeeLake Xeon E-2276ML Processor
- DDR4 16G RAM with ECC
- Isolated 8 x LAN, 10 x Serial Port Communication Interfaces
- 110-240 V<sub>DC</sub>/V<sub>AC</sub> Power Supply
- 2 x IO Expansion Slots
- 2 x 2.5" SATA HDD, 1 x mSATA
- DVI-I, DVI-D Display Interface
- Programmable LEDs
- 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 Power Supply

Power1: 100 ~ 240 V<sub>AC</sub>, 100 ~ 240 V<sub>DC</sub> (Inside) Power2: 100 ~ 240 V<sub>AC</sub>, 100 ~ 240 V<sub>DC</sub> (option)

Power Consumption

 Operating System Windows 10, Windows Server 2012 R2,

Windows Server 2016

**Dimensions (W x D x H)** 440 x 280 x 88 mm SECC and aluminum Enclosure

6.0 Kg Weight Mounting 2U Rackmount System Design **Fanless** 

#### **System Hardware**

Intel 9th Gen CoffeeLake Xeon E-2276ML CPU

(Base Frequency 2.00 GHz, Turbo Frequency 4.20 GHz)

DDR4 1.2V ECC 16G, Up to 64G) Memory LEDs for PWR1, PWR2, HDD, LAN Indicators

(LINK, ACT), COM (TX, RX), Slot 1, and Slot 2,

Programmable

2 x 2.5" SATA HDD (RAID0, RAID1) Storage

1 x mSATA

HDD Height less than 11mm

1 x DVI-I, 1 x DVI-D (Resolution: 1920 x 1080) Display Programmable 256 levels time interval, from 1 to 255 Watchdog Timer

seconds for each tier

Relay Output Form C Relay

Contact 5A @ 125V<sub>AC</sub>/ 5A @ 30V<sub>DC</sub>

Channel 1

#### **Communication Interface**

 Serial Ports 2 x RS-232 (DB9 connectors, Standard)

8 x RS-232/422/485 (Terminal Block)

2,500V isolation

RS-232: 50 ~ 115.2 kbps Serial Port Speed

RS-422/485: 50 ~ 921.6 kbps (Max.)

8 x 10/100/1000 Base-T RJ45 ports LAN

(Supports teaming function, PXE, LAN1 supports AMT) 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 PCle and 2 x PCl)

### **Environment**

• Operating Temperature  $-25 \sim 60^{\circ}\text{C} (-13 \sim 140^{\circ}\text{F})$ 

IEC 60068-2-2 with 100% CPU/ I/O

loading, 24 hrs

- Operating Humidity 5 ~ 95% RH (non-condensing) 5 ~ 95% RH (non-condensing) **Storage Humidity Shock Protection** IEC 68 2-27: 30 G half sine,11 ms

**Vibration Protection** IEC 68-2-64 (Random 1 Oct./min, 1hr/axis.)

## **Ordering Information**

ECU-4784-G57SCE ECU-4784-G57SCU Intel 9th Gen CoffeeLake Xeon E-2276ML Hexa-core processor with ECC 32 GB RAM, 8 x LAN, 10 x COM,

2 x expansion slots

ECU-4784-G58SCE ECU-4784-G58SCU Intel 9th Gen CoffeeLake Xeon E-2276ML Hexa-core ECC 64 GB 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)