# ECU-4784-E5

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



## **Features**

- Intel 6th Gen Skylake Xeon E3-1505L Processor
- DDR4 RAM with ECC, up to 32GB
- 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 (RAID 0,1); 1 x CFast
- VGA, 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 $V_{AC}$ , 100 ~ 240 $V_{DC}$ (default)	
		Power2: $100 \sim 240 V_{AC}$ , $100 \sim 240 V_{DC}$ (default) Power2: $100 \sim 240 V_{AC}$ , $100 \sim 240 V_{DC}$ (option)	
•	Operating System	Windows10, Windows Server 2016/2019	
•	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 6th Gen SkyLake Xeon E3-1505L	
		(Base Frequency 2.00 GHz, Turbo Frequency 2.80 GHz)	
•	Memory	DDR4 1.2V ECC RAM Up to 32GB	
•	Indicators	LEDs for PWR1, PWR2, HDD, LAN	
		(LINK, ACT), COM (TX, RX), Slot 1, and Slot 2,	
_	Chavana	Programmable	
•	Storage	2 x 2.5" SATA HDD (RAID 0,1); 1 x CFast HDD Height less than 11mm	
•	Display	1 x 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 <sub>AC</sub> / 5A @ 30V <sub>DC</sub>	
		Channel: 1	

## **Communication Interface**

<ul> <li>Serial Ports</li> </ul>	2 x RS-232 (DB9 connectors, Standard) 8 x RS-232/422/485 (Terminal Block) 2,500V isolation
<ul> <li>Serial Port Speed</li> </ul>	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)
• 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)
<ul> <li>Expansion</li> </ul>	2 x Domain I/O expansion slots

### Environment

- Operating Temperature -25 ~ 60°C (-13 ~ 140°F) IEC 60068-2-2 with 50% CPU/ I/O Ioading, 24 hrs
- Operating Humidity
- **Storage Humidity** 5 ~ 95% RH (non-condensing)
- Shock Protection IEC 68 2-27: 30 G half sine,11 ms
  - Vibration Protection IEC 68-2-64 (Random 1 Oct./min, 1hr/axis.)

5 ~ 95% RH (non-condensing)

# **Ordering Information**

- ECU-4784-E56DAE Intel 6th Gen Skylake Xeon E3-1505L Quad-core processor with ECC 16 GB RAM, 8 x LAN, 10 x COM, Dual PSU
   ECU-4784-E56SAE Intel 6th Gen Skylake Xeon E3-1505L Quad-core processor with ECC 16 GB RAM, 8 x LAN, 10 x COM
   ECU-4784-E57SAE Intel 6th Gen Skylake Xeon E3-1505L Quad-core processor with ECC 32 GB RAM, 8 x LAN, 10 x COM
   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: 48V power module is available upon request via Advantech CTOS)