Hello everyone!
We will wait 5 mins
for everyone to join.

JHCTECH IoT Computer Connecting the Dots

ECC-U5000

Speakers

Gary
Customer Solution Manager
JHCTECH Shenzhen Office

NEW PRODUCT LAUNCH

LIVE

Product Launch Announcement

Time	Agenda
16:00 ~ 16:05	**Opening** Chi Wang, Marketing Manager, Shenzhen Office
16:05 ~ 16:25	**Introduction of New Product** **Energy Storage EMS Controller --- ECC-U5000** Gary Shu, Customer Solution Manager, Shenzhen Office
16:25 ~ 16:35	**Q&A**

Product Launch Announcement

Time	Agenda
22:00 ~ 22:05	**Opening** Chi Wang, Marketing Manager, Shenzhen Office
22:05 ~ 22:25	**Introduction of New Product** **Energy Storage EMS Controller --- ECC-U5000** Gary Shu, Customer Solution Manager, Shenzhen Office
22:25 ~ 22:35	**Q&A**

JHCTECH
Connecting the Dots

Energy Storage EMS Controller ECC-U5000

ECC-U5000

JHCTECH

CONTENTS

01 ECC ROADMAP

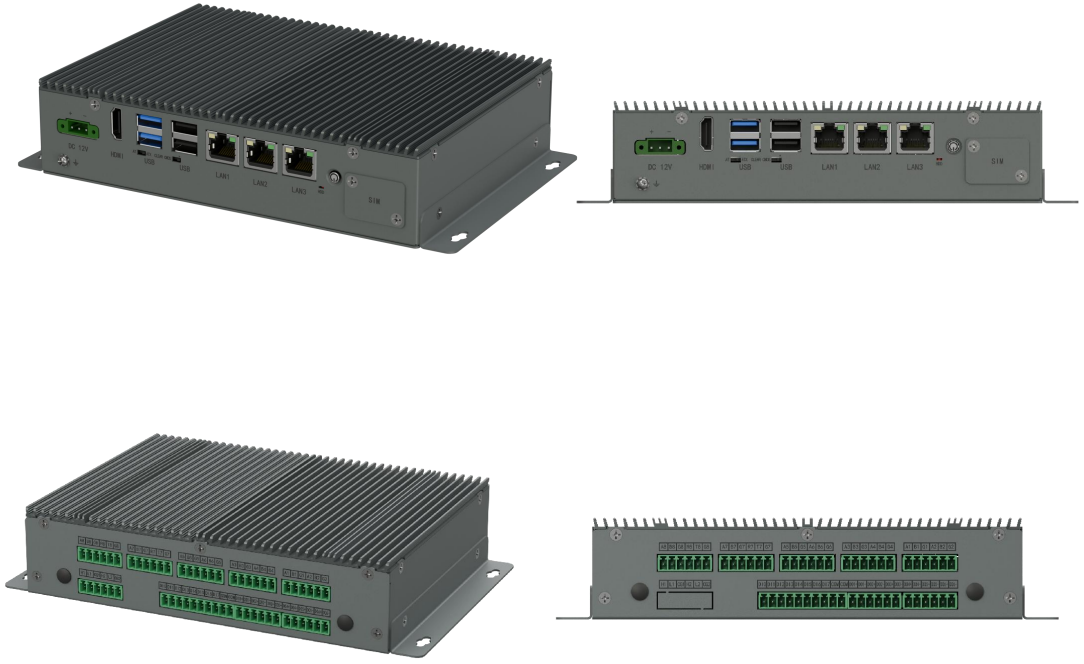
	2023 Q4	2024 Q1	2024 Q2	2024 Q3	2024 Q4
Intel Elkhart lake U		EVT  ECC-U5000			
Intel Tiger lake U			Planning  ECC-U5001		

Planning

Developing

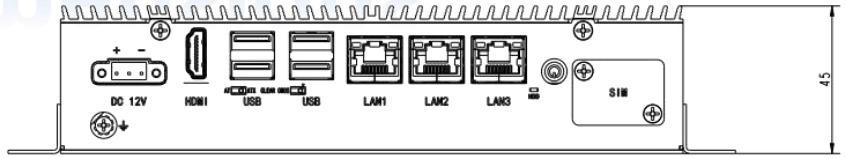
MP

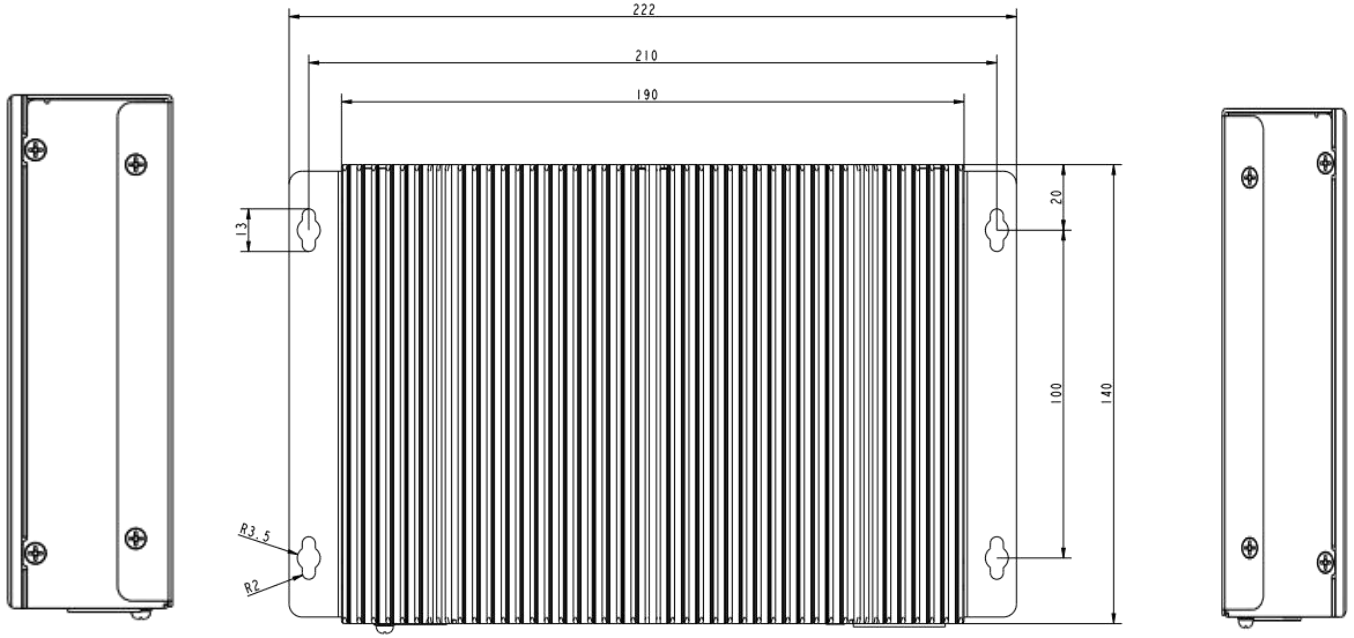
02 ECC-U5000 Product Specs



CPU	Intel® Elkhart lake Soc CPU
RAM	1*DDR4 3200MHz SODIMM, supports up to32GB
Display	1*HDMI
LAN	3*RTL811H-VB
USB	2*USB3.1，2*USB2.0
COM	2*RS232/422/485+6*RS485
CAN	2*CAN
DIO	8*DI+6*DO with isolation
Expansion	3*MiniPCIe（1*MiniPCIe supports 4G，with SIM slot，1*MiniPCIe supports mSATA，1*MiniPCIe interface reserved）
Storage	1*mSATA
Power Supply	DC-IN 12V（standard） 9~36V（optional）wide voltage input, overvoltage, overcurrent, and reverse polarity protection

02 ECC-U5000 Dimensions





Overall Dimensions：222*140*45mm
Without mounting parts：190*140*45mm
Weight：1.32KG

03 ECC-U5000 Features

1. Intel® Gen10 UHD Graphics Core
2. High-Speed Isolated DIO
3. Modular Design for CAN
4. Wide Voltage Power Supply Modular Design
5. Abundant IO Interfaces
6. Fanless Passive Cooling Design
7. Modular Design for the Entire System
8. Ultra-thin Machine Design

Intel® Ultra Core Graphics

Support 4K Display Output

- Capable of driving up to three independent displays simultaneously
- Supports resolutions up to 4Kp60

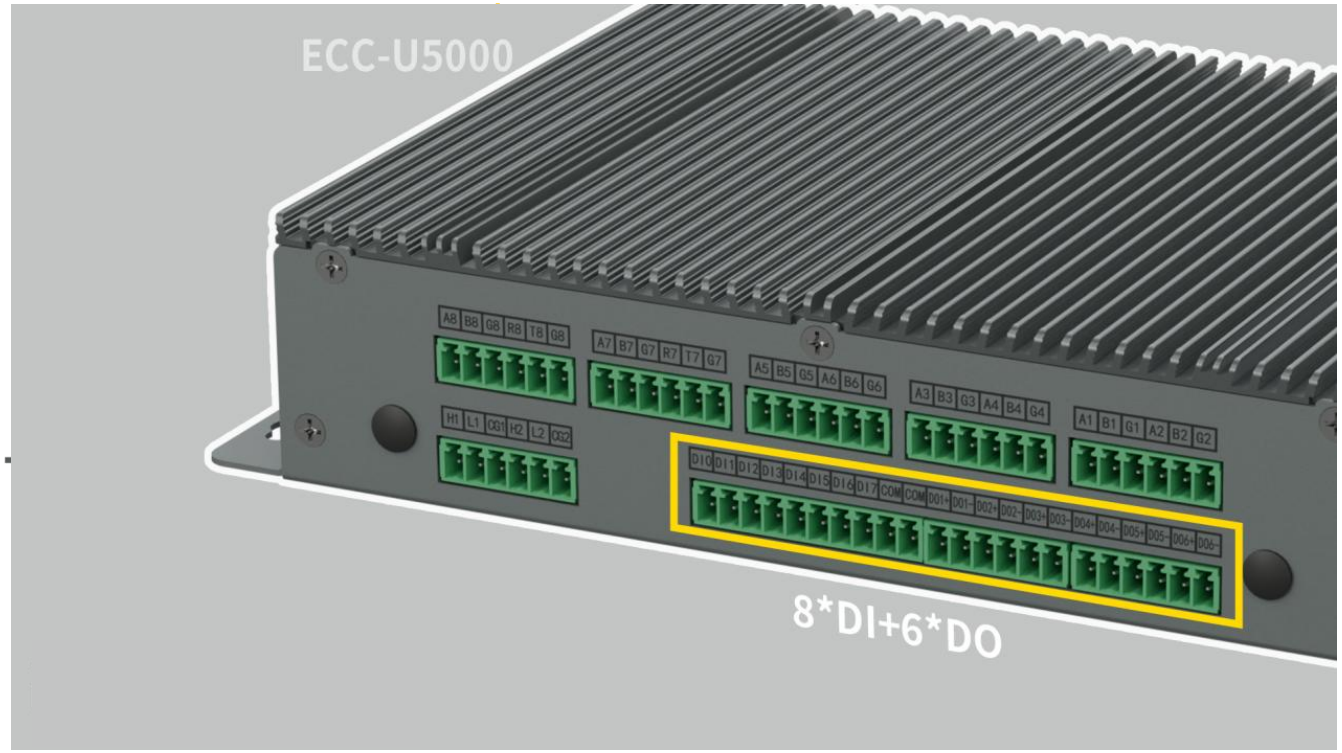
Performance Boost up to 2x Intel® Ultra Core Graphics

Outstanding Video Encoding and Decoding Capabilities

- Supports parallel decoding, integrating advanced media encoders and decoders for the latest H.265 encoding.
- Encoding HW Encode: Supports H.265/HEVC, H.264/MPEG-4 AVC, MPEG-2, JPEG/MJPEG, VP8;
- Decoding HW Decode: Supports H.265/HEVC, H.264/MPEG-4 AVC, MPEG-2, VC-1/WMV9, JPEG/MJPEG, VP8, VP9

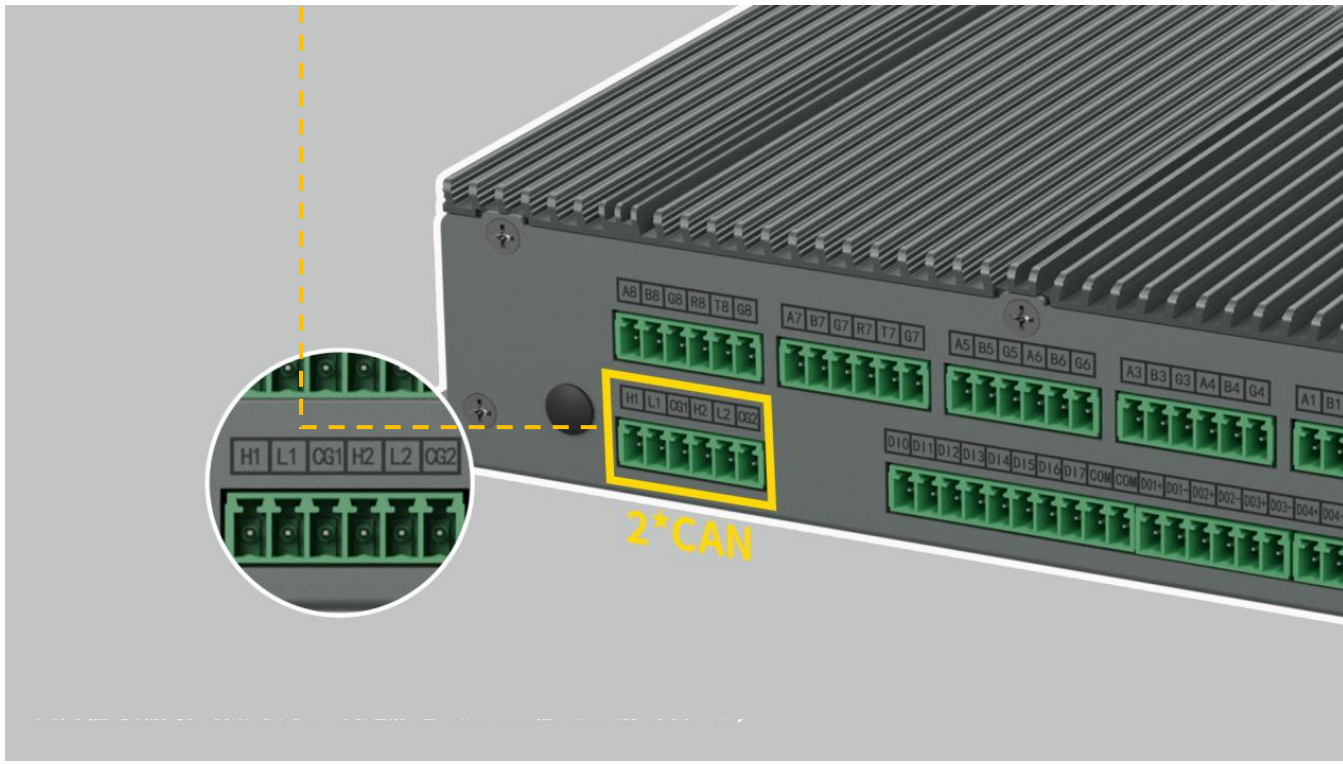
High-Speed Isolated DIO

- 8*DI are in Phoenix terminal form, with wet node input signal type, 24V/0V high and low level, opto-isolated. 6*DO are in Phoenix terminal form, with relay normally open output and passive output, relay contact capacity: 30VDC/5A, 250V/AC/5A.
- Each pin is physically and electrically isolated from the other, reducing voltage spikes, ground loops, and common mode signal interference during data acquisition.
- DIO speed is 1MHz, pulse cycle reaches 1us/pulse wave.



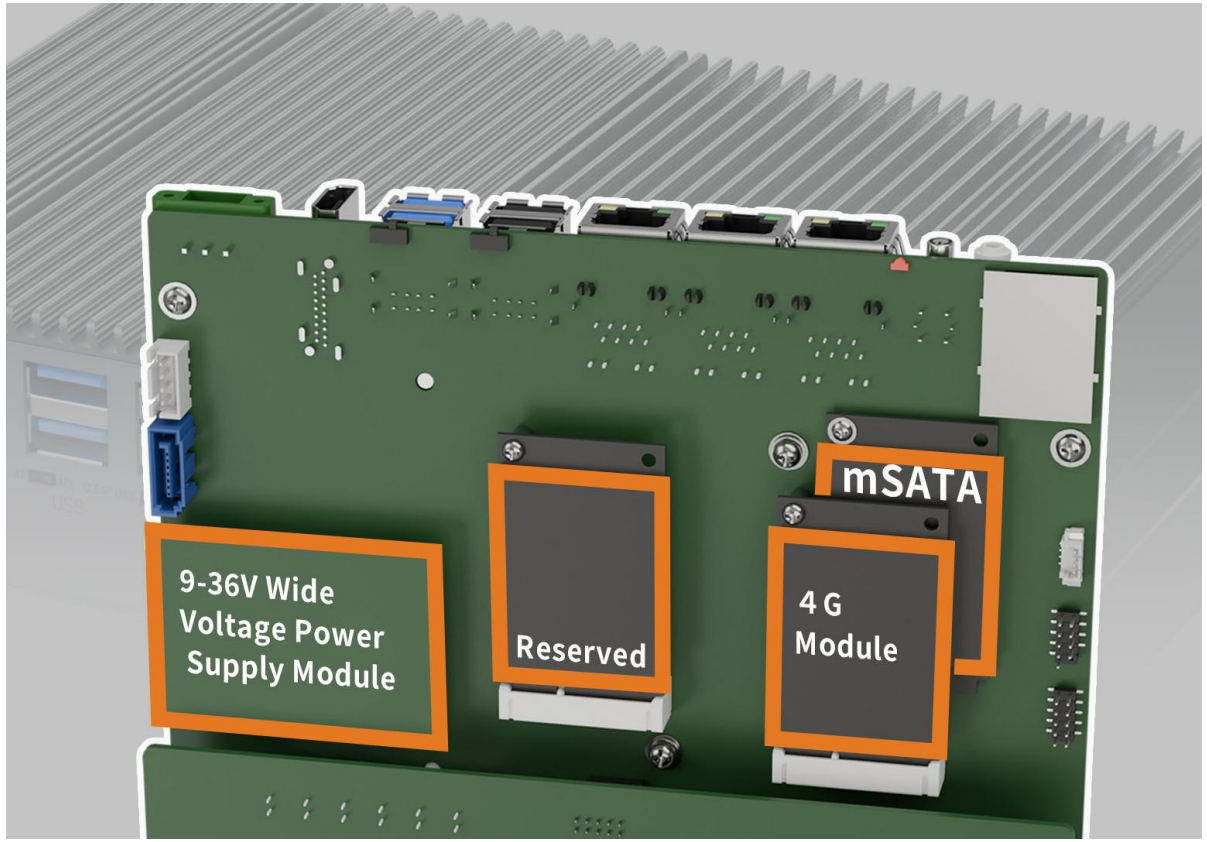
Modular Design for CAN

- Supports CAN BUS protocol
- 2*CAN uses 3.81-6P green phoenix terminals, with wire sequences H, L, and GND, compliant with CAN2.0B standard and supports signal isolation. Protection requirements: meets ESD level 3, surge level 3, pulse group level 3.
- Supports CAN message acceptance filtering, baud rates of 10/20/50/100/250/500/800/1000K
- Used to connect to the Battery Management Unit (BMU) on the Battery Management System (BMS).



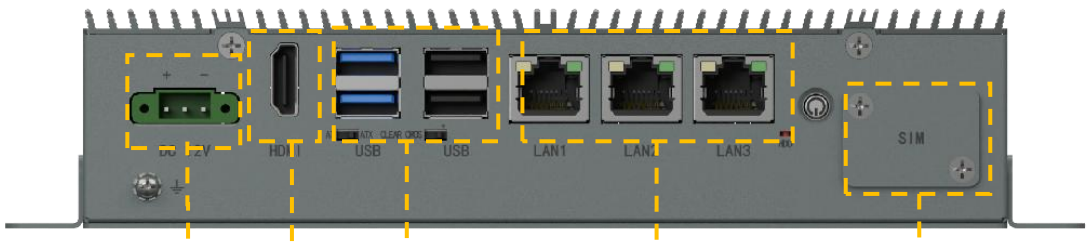
Wide Voltage Power Supply Modular Design

- Modular Wide Voltage Power Supply OFX-075 (DC 9~36V), with overvoltage/overcurrent/reverse polarity/short circuit protection, suitable for power supply environments in energy storage EMS systems;
- Also supports economical DC 12V direct current power supply, providing a flexible power solution selection.



Abundant IO Interfaces

- The IO interfaces with multi-network and multi-string configurations can meet the data acquisition needs of energy storage EMS systems



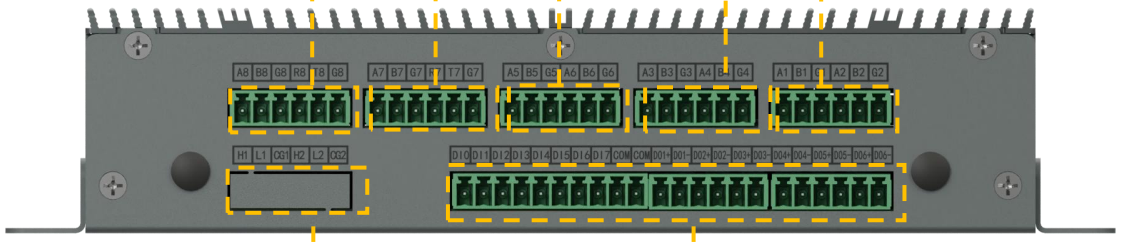
DC IN

1*HDMI

2*USB3.1+2*USB2.0

3*LAN

1*SIM



COM8
RS232/485

COM7
RS232/485

COM5/6
RS485

COM3/4
RS485

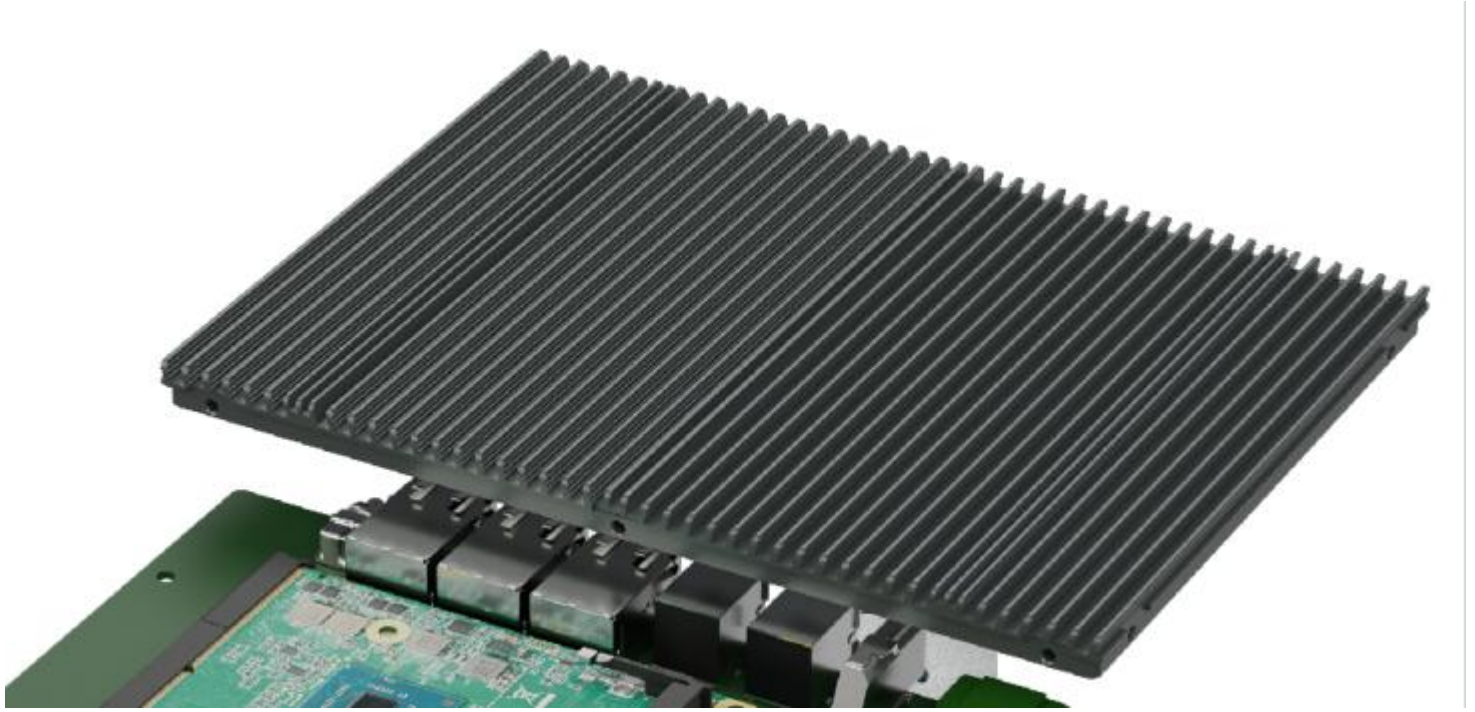
COM1/2
RS485

2*CAN

8*DI+6*DO

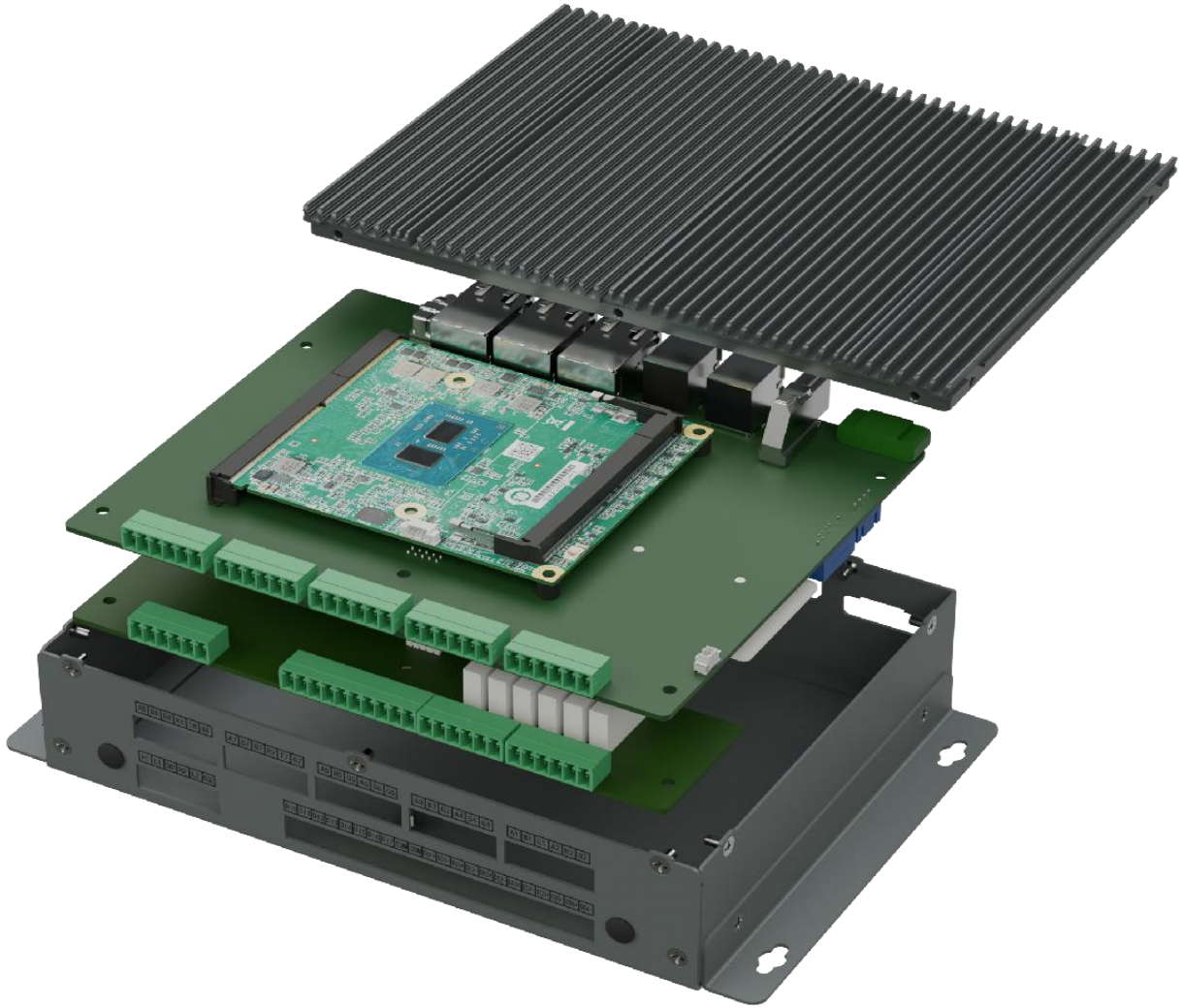
Fanless Passive Cooling Design

- SoC CPU with copper heat pipes and aluminum chassis, thermal grease filled for contact heat conduction to the aluminum chassis for heat dissipation
- CPU full load operating temperature -20~60℃, suitable for semi-enclosed or semi-outdoor working environments
- Fanless enclosed chassis structure, IP41 protection rating.

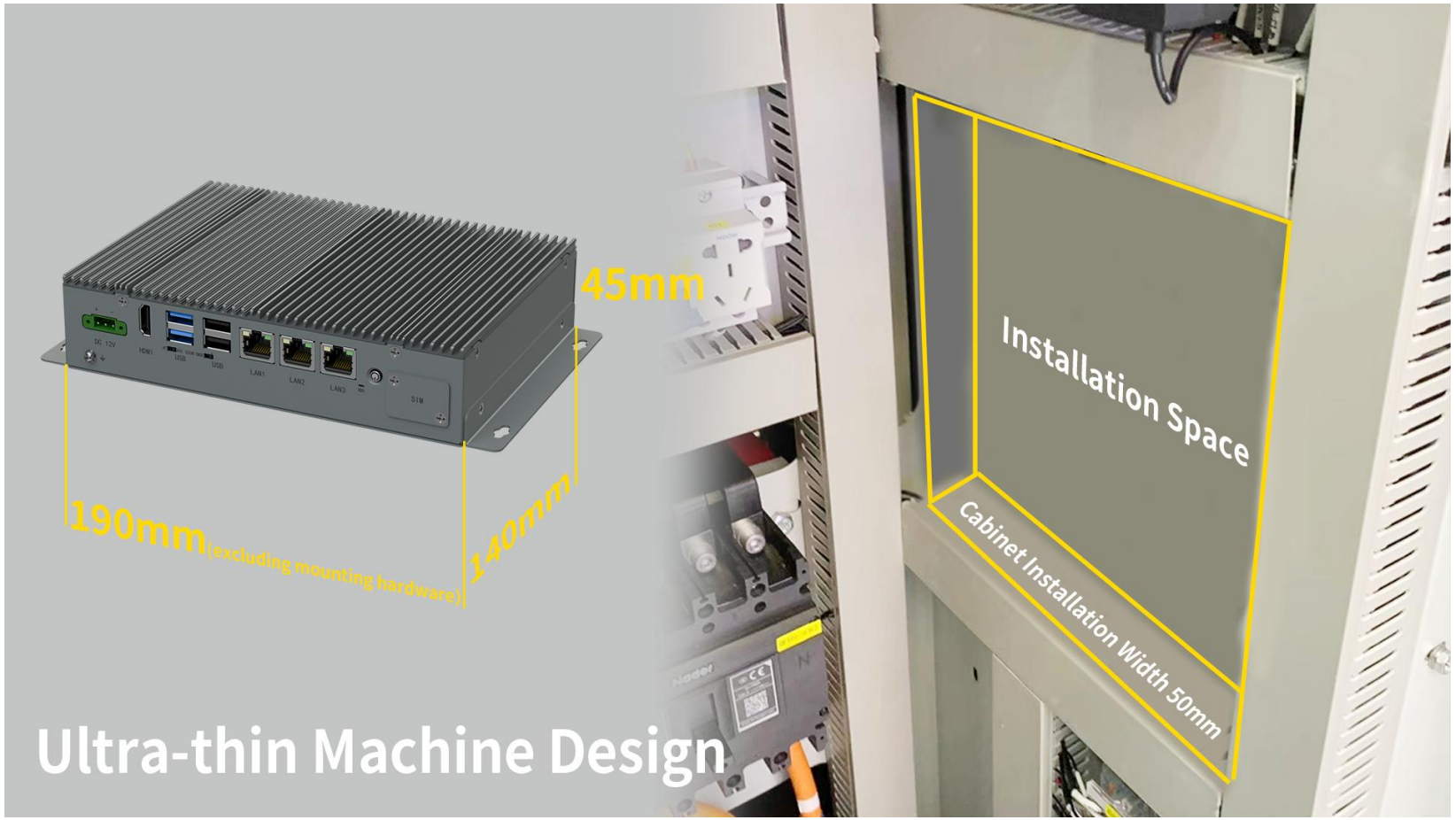


Modular Design for the Entire System

- Three-in-One Main Structure: Front Panel + Rear Panel + Heat Dissipation Profile
- Modular Built-in Components: MXM Motherboard + PIB Carrier Board + Expansion Daughter Cards
- Fanless Cooling Design, High Practicality, Assembly, and Maintenance Capability



Ultra-thin Machine Design



- Adopting an ultra-thin model design, the overall height of the machine is only 45mm, which meets the installation width requirements of most cabinets.

04 ECC-U5000 Ordering Info

ECC-U5000 Ordering Specs

Model	DC-IN	Description
ECC-U5000/ S001	12V	Embedded Box PC，8*COM，2*USB3.1+2*USB2.0，3*LAN，1*HDMI，3*Mini PCIe （1*MiniPCIe supports 4G with SIM card slot、1*MiniPCI supports mSATA，1*MiniPCIe expansion interface reserved），8*DI+6*DO，2*CAN，DC 12V or optional 9~36V DC power supply
ECC-U5000/ S001-WP	9~36V	
PA-60DC12	AC/DC power adapter, DC12V@5A ,60W	

05 ECC-U5000 Market Direction

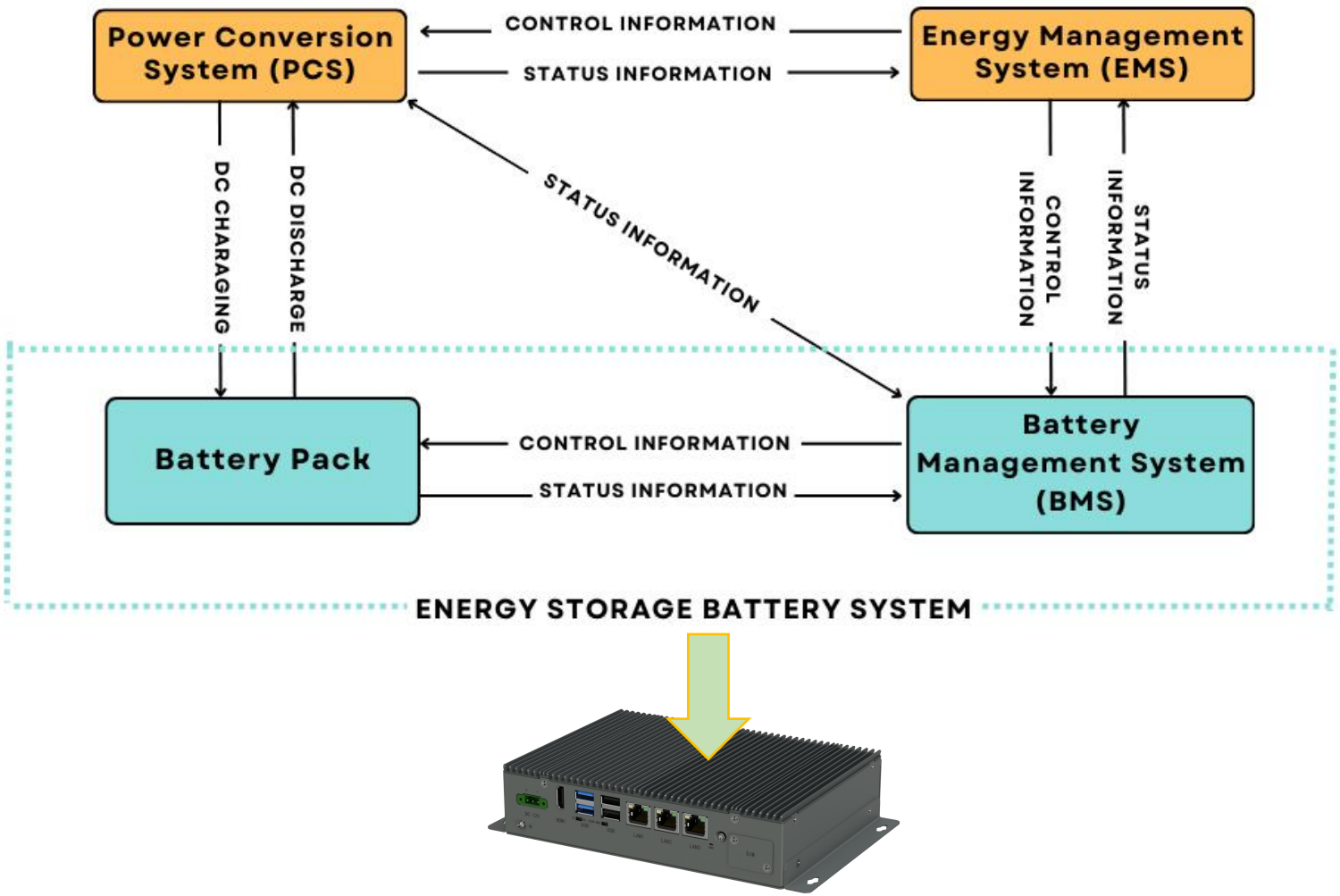
Energy Storage Power Station

Commercial & Industrial Energy Storage

Home Energy Storage

- Mechanical Energy Storage
- Electrical Energy Storage
- Electrochemical Energy Storage - EMS System
- Chemical Energy Storage
- Thermal Energy Storage

06 ECC-U5000 Application Scenarios



1）Monitoring and collecting battery charging/discharging status, temperature, voltage, current, etc.

2）Data analysis and optimization, adjusting charging/discharging strategies, optimizing energy utilization efficiency.

3）Energy scheduling and control, arranging the charging/discharging operations of energy storage facilities reasonably based on demand forecasts, electricity prices, grid loads, etc.

4） Fault detection and safety protection, such as over-discharge, over-charge, abnormal temperature, etc., to ensure the safe operation of energy storage facilities.

07 ECC-U5000 Product Schedule

Sample Testing Time

March 2024

Small Batch Production Time

May 2024

Q&A

Q1: What is the maximum consumption of this ECC-U5000?

A1: The maximum consumption is about 21W.

Q2: What is the CAN protocol of this ECC-U5000?

A2: The protocols are CANBUS and CAN2.0

Q3: What is the voltage of the DIO?

A3: The input voltage of the DI can support 5-24V, the DO is passive signal.

Stay in Touch

JHC Technology Development Co.,Ltd.

@ Shenzhen JHC Technology Development Co., Ltd.

@JHCTECH

Website

Youtube

CONTACTS

Marketing Department
marketing@jhctech.com.cn
sales@jhc-technology.com

Customer Solution Manager
shuyang@jhctech.com.cn