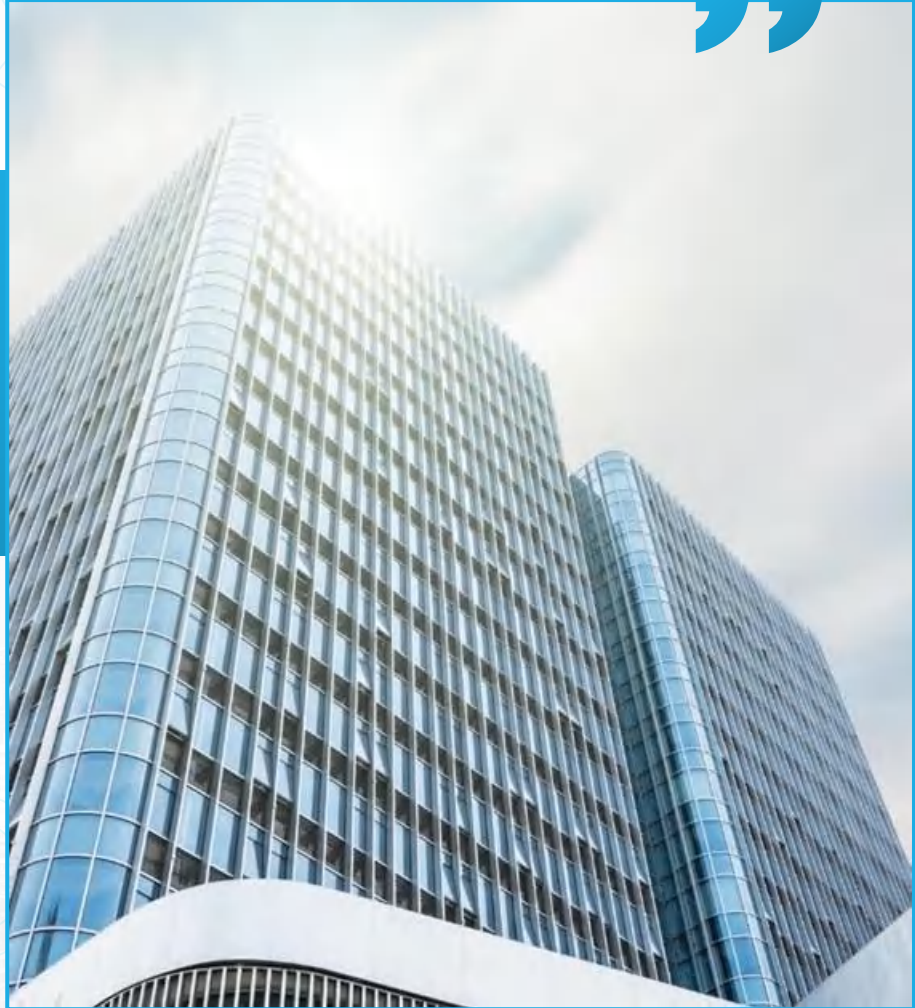


ENTERPRISE



# LYNNYL TECHNOLOGY CO.,LTD

 Workshop No. 2, Baoxin Science Park, Guangming District, Shenzhen

INTRODUC



Home page

Directory

Company profile

Design And  
Development

Manufacturing  
system

Product  
Introduction

Partner

Future Planning



Home page

## Directory

Company profile

Design And  
Development

Manufacturing  
system

Product  
Introduction

Partner

Future Planning



# CONTETNS



Part 01

COMPANY  
PROFILE

Part 02

DESIGN  
DEVELOPMENT

Part 03

MANUFACTURING  
SYSTEM

Part 04

PRODUCT  
INTRODUCTION

Part 05

COOPERATIVE  
PARTNER

Part 06

FUTURE  
PLANNING







# PART 01

## PART 01

# COMPANY PROFILE

BMS intelligent battery management system,  
battery management solutions

# PROFILE



Home page

Directory

Company profile

Design And Development

Manufacturing system

Product Introduction

Partner

Future Planning



# COMPANY PROFILE



2016

Establishment time

2200 m<sup>2</sup>

Company area

150  
people

Employee

150  
million

Annual output value

30  
items

Number of patents

20  
people

r&d team







# 动力电池智能管理系统解决方案

## INTELLIGENT BMS SOLUTION FOR POWER BATTERY

### Company engaged in projects

National high-tech enterprise engaged in the research and development, production, and sales of battery management systems (BMS)

### Authority of the company

A cooperative unit between the University of Electronic Science and Technology and Southwest Jiaotong University, it is a national high-tech enterprise and a "specialized, refined, and innovative" enterprise in Shenzhen. It has been deeply involved in the field of lithium-ion batteries for many years and provides intelligent product solutions for the application of new energy power batteries and energy storage batteries

### Professional management and R&D team

Possessing multiple invention and utility model technology patents, successfully developing and mass producing multiple BMS intelligent battery management systems

### Core values

Continuously Creating Value, Win-Win and Prosperity with Customers

# COMPANY PROFILE



University of  
Electronic Science  
and technology  
Academic research  
cooperation unit



Quality Management  
System Certificate  
ISO9001:2015



Shenzhen City  
High tech enterprises



# More than 30 patent achievements



Invention Patent **5 items** utility patent **13 items** Software Works **20 items**





# Company development history





Home page

Directory

Company profile

**Design And  
Development**

Manufacturing  
system

Product  
Introduction

Partner

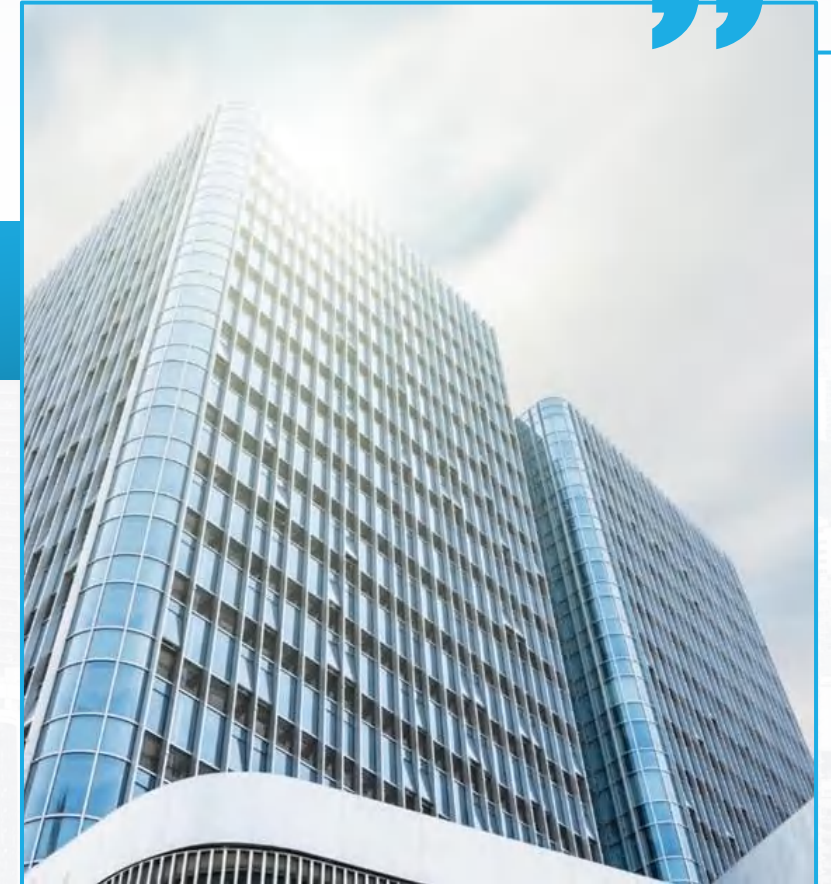
Future Planning

PART02

**PART 02**

# Design And Development

BMS intelligent battery management system,  
battery management solutions



# R&d team

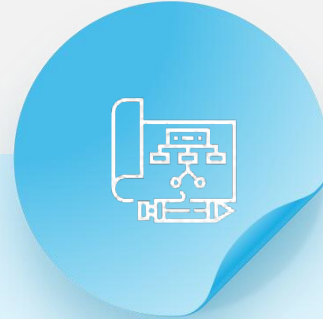


## Team members

17 people in total

Core Senior Software Engineer 3

Senior Electronic Engineer 7



## Team Education

1 postdoctoral fellow

2 graduate students  
currently studying

14 undergraduate/  
associate students



## Team experience

Industry experience  $\geq$  10 years: 10

300+ new project  
developments per year



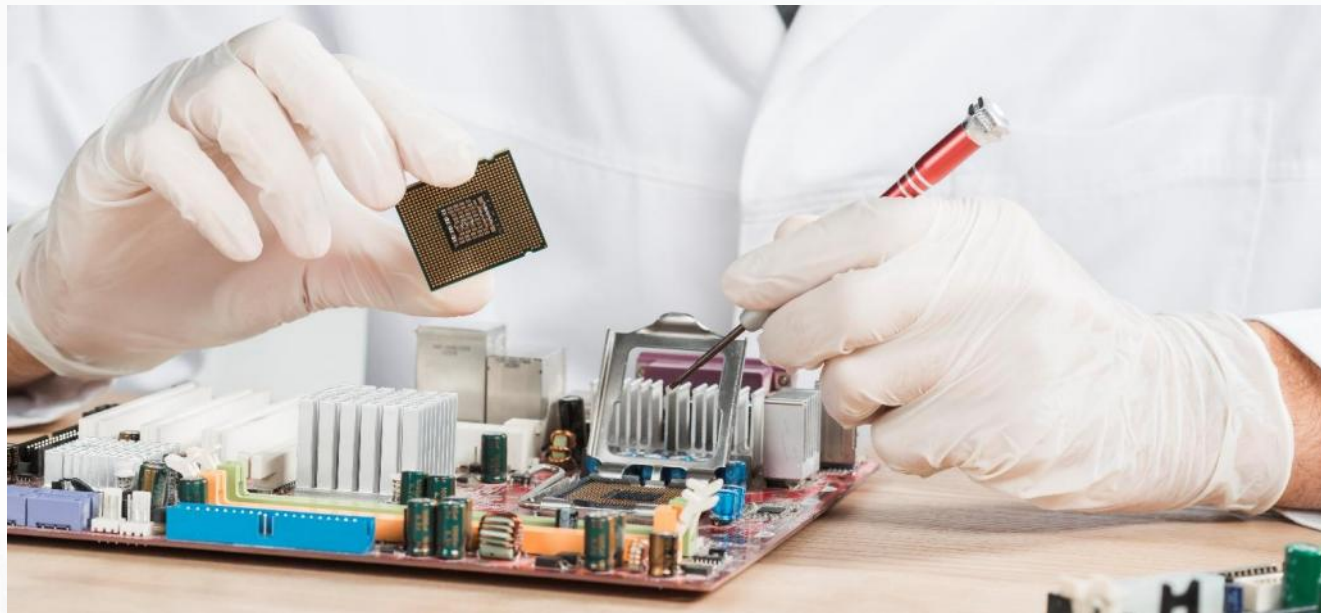
# R&d team



Product development cycle



Urgent Projects  
Product development capability



Product name	Number	Current/power
Electricity meter products	1-4	persistent current 30A
Hardware protection board	4-28	maximum continuous current 200A
Software protection board	3-20	Maximum duration 100A
Clean the battery control board of household appliances	3-10	Brushed and brushless motors with maximum power 850W



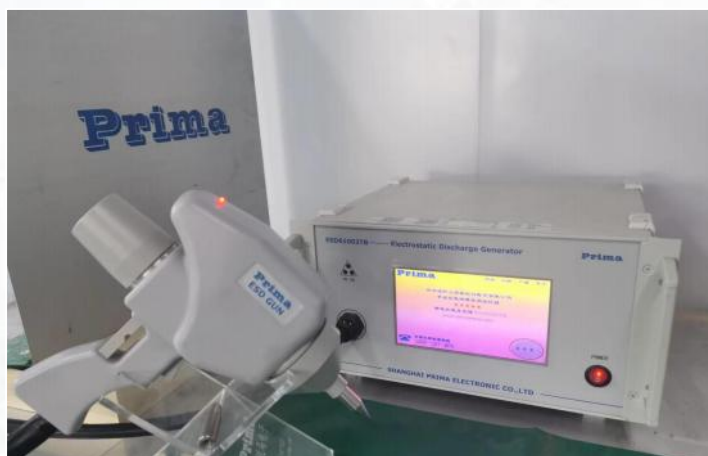
Salt spray testing machine



Desktop Moulder



Constant temperature and humidity box



Electrostatic tester



R&D  
equipment



Digital bridge

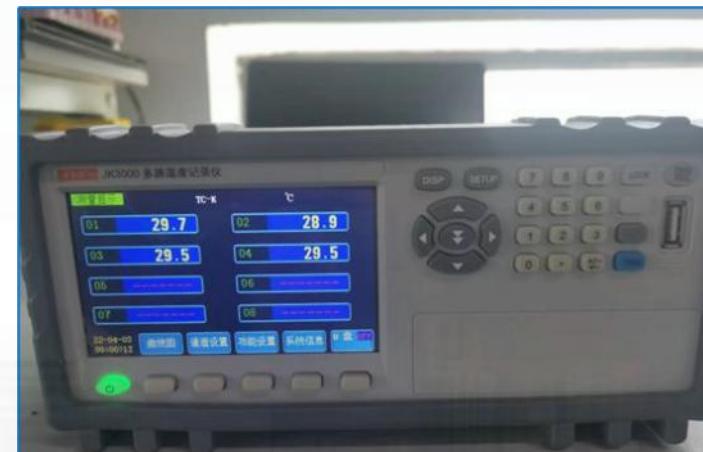




MOS tube tester



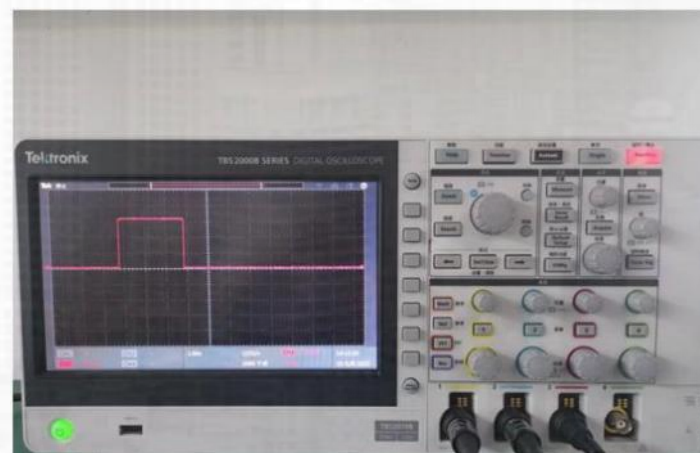
# R&D equipment



Multichannel temperature recorder



6KW DC load



oscilloscope



5KW DC power supply

Home page

Directory

Company profile

Design And  
Development

**Manufacturing  
system**

Product  
Introduction

Partner

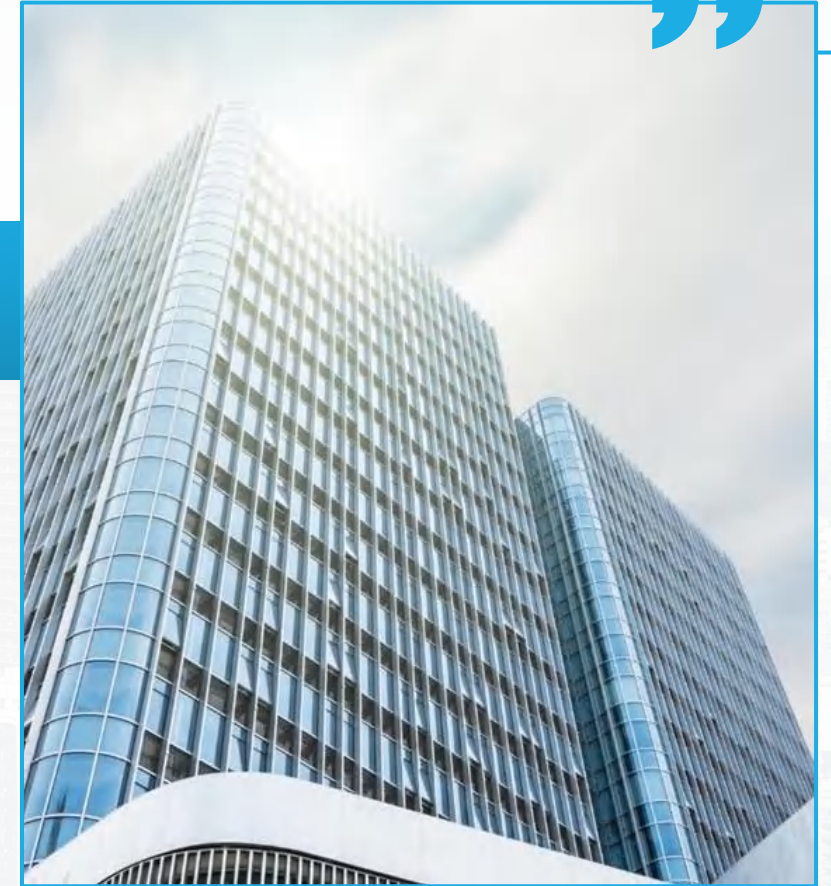
Future Planning

PART03

**PART 03**

# Manufacturing system

BMS intelligent battery management system,  
battery management solutions





# Manufacturing system: workshop environment

01

## • SMT clean workshop

Automatic solder paste printing machine

SPI detector Automatic high speed SMT machine

Large hot air lead-free reflow welding machine

AOI visual inspection process equipment

Automatic loading and unloading machine

Make the whole product process to avoid human contact caused by bad problems



02

## • SMT clean workshop

Mainly complete the welding, testing and repair of all patch series devices



# Manufacturing system: workshop environment

1

## Dust-free workshop

Automatic soldering machine/glue spraying machine/spray machine/curing furnace and other production equipment, semi-automatic tester testing semi-finished products/finished products, so that the whole product process can be efficient and more comprehensive to ensure product quality, to ensure product consistency



2

## Dust-free workshop

Mainly complete the welding and assembly of all structural parts, semi-finished product/finished product inspection, finished product appearance inspection and meet other requirements of customers





# Manufacturing equipment --SMT

## Brand: Sanzhong Technology ▶

Automatic loading machine



## Brand: Statik ▶

Solder paste detector



## Brand: Shenzhen Zhengshi ▶

Fully automatic printing machine



## Brand: Yamaha ▶

Fully automatic patch machine



# Manufacturing equipment --SMT



**Brand: Jin Tuo**

Double-track reflow welding

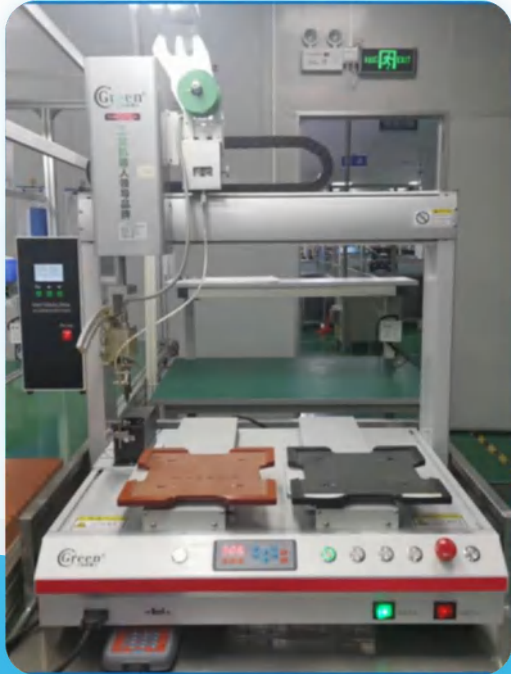


**Brand: Jusi**

Optical detector



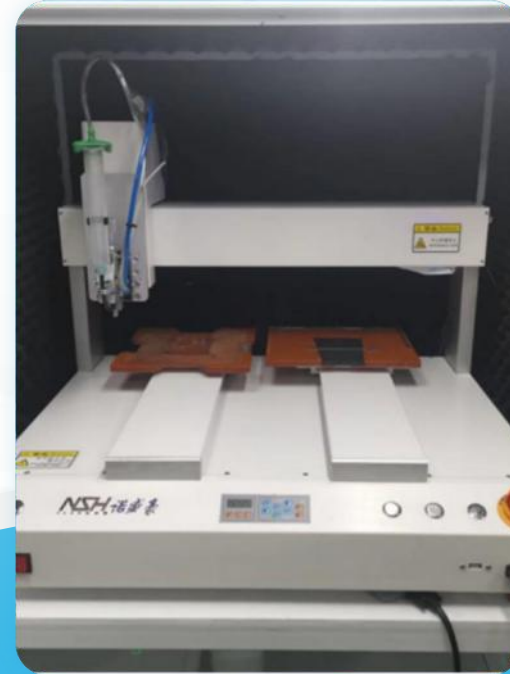
# Manufacturing equipment - Assembly



Automatic soldering machine



Desktop sprayer

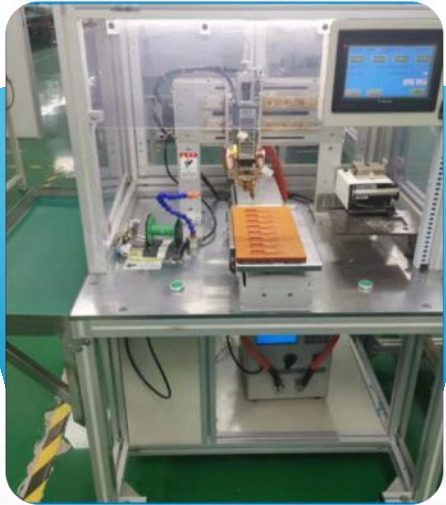


Automatic glue spraying machine



Integrated curing furnace

# Manufacturing equipment - Assembly



**Press welder**



**Power protection  
plate tester**



**Burning tester**



**Comprehensive  
tester**



Home page

Directory

Company profile

Design And  
Development

Manufacturing  
system

**Product  
Introduction**

Partner

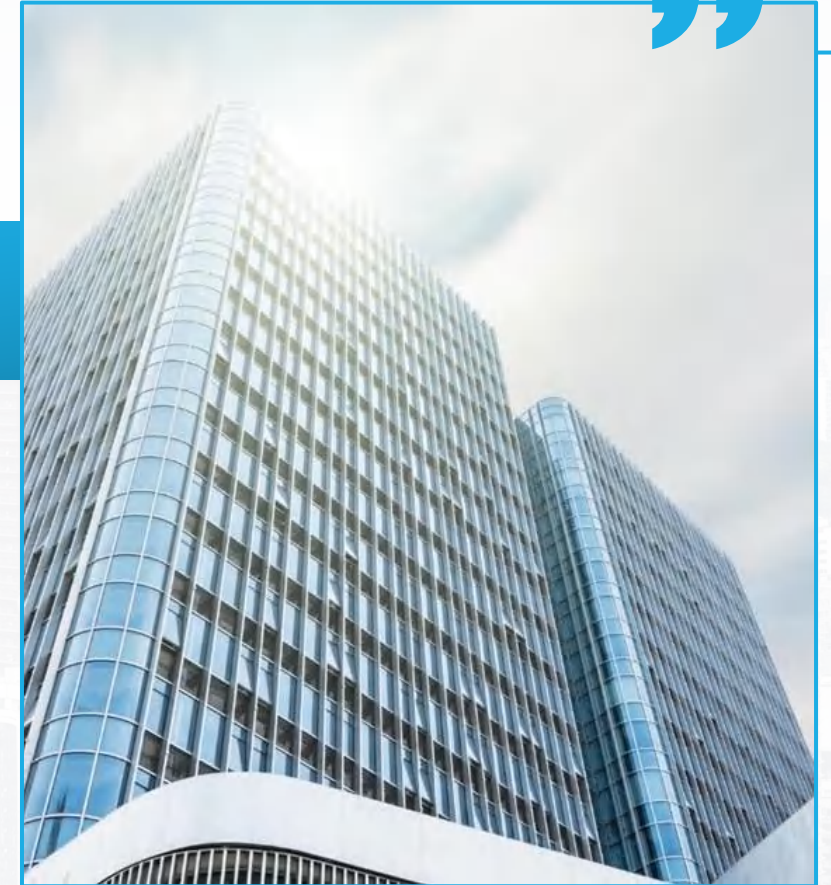
Future Planning

PART04

**PART 04**

# Product Introduction

BMS intelligent battery management system,  
battery management solutions



# Hardware protection board



## Characteristics

- Complete hardware protection, low power consumption design
- High grade ESD  $\geq 12\text{KV}$
- Intelligent autonomous break detection function
- UL2271/UL2272 authentication is supported

## Application field

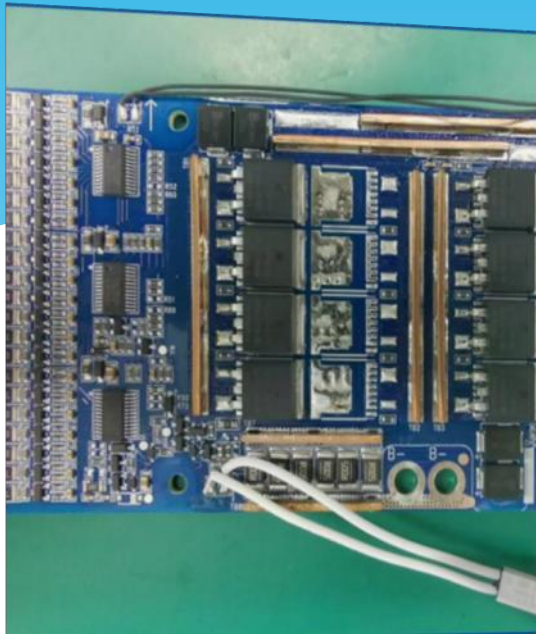
*Electric scooters, electric two-wheelers, power tools*

## Advantage

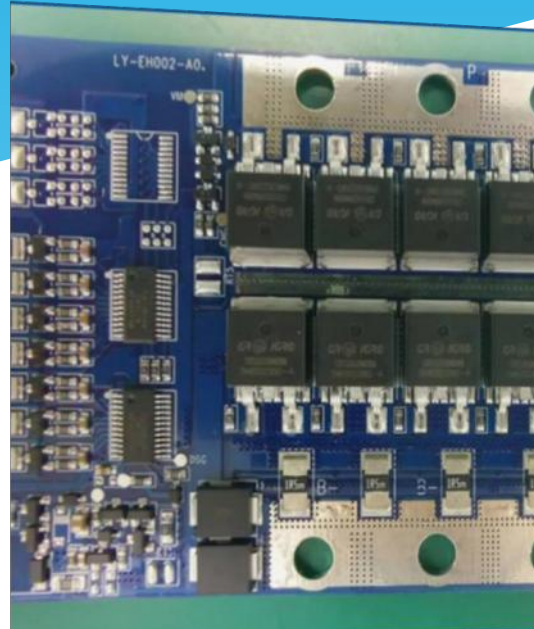
- 1、 To provide customers with different cost-effective options
- 2、 Ability to add extended functionality and custom development for customers
- 3、 Rapid response one week from evaluation to sample



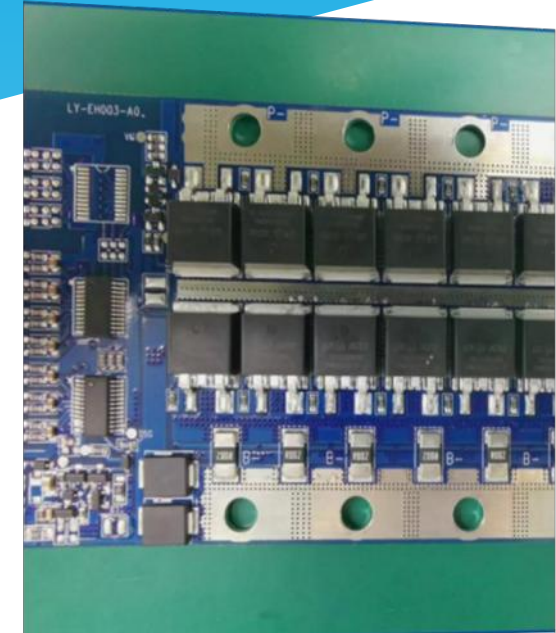
# Hardware protection board



Electric two-wheel  
battery protection  
panel



Battery protection  
panel for power tools



Spare battery  
protection board

# Communication software board



## Characteristics

- Support host computer, APP display
- Compatible with URAT\RS485\CAN BUS interface
- Support program online upgrade function

## Application field

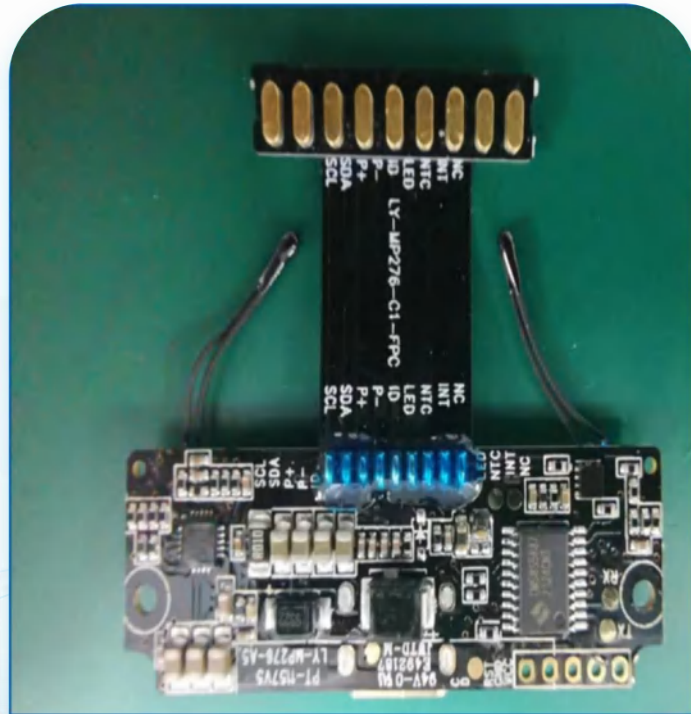
*Energy storage battery pack, intelligent power tools, AGV robot*

## Advantage

- 1、 200+ project cases have accumulated rich development experience
- 2、 The use of domestic imported IC to solve the lack of core bottleneck
- 3、 High and low edge MOS driver, integrated SOC and independent SOC optional
- 4、 Multiple modes of sleep and wake up function



# Communication software board



Intelligent door lock battery protection plate



Battery protection panel for industrial equipment



Security monitoring battery protection panel

# Intelligent protection panel



## Characteristics

- Complete protection function, high precision SOC estimation
- Powerful extension functions and rich communication interfaces
- One-stop chemical ID to mass production aging data

## Application field

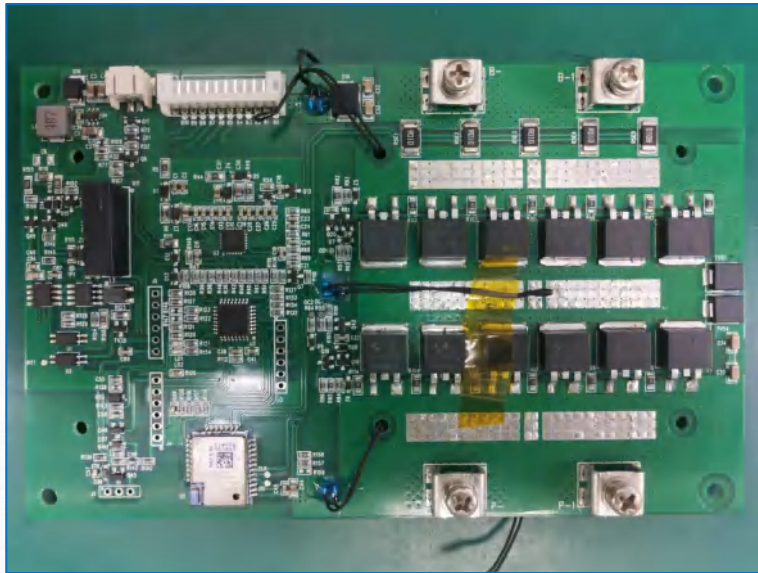
- Smart Home: Smart doorbell/lock, wireless camera, service robot battery
- Handheld terminal: POS machine battery, security detector battery
- Industrial control medical treatment: infrared thermal imager battery, portable ventilator battery

## Advantage

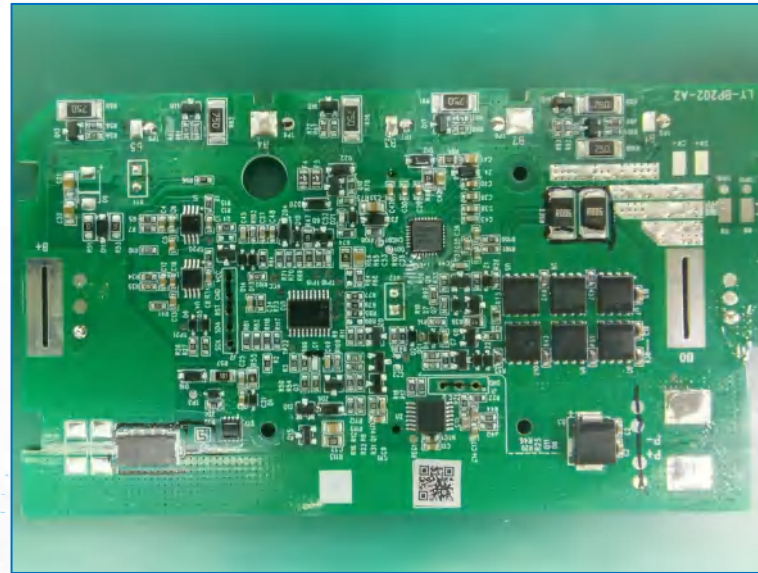
- 1、 Multi-brand coulometer IC mass production (TI, Kurkang, Zhongying, Liqi, Saiwei)
- 2、 300+ project development experience
- 3、 It has the aging learning ability of coulometer battery pack



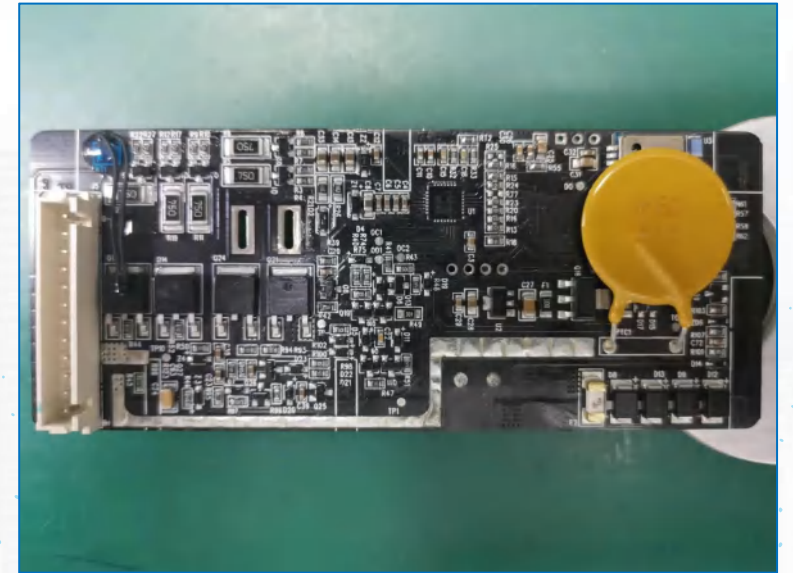
# Intelligent protection panel



Energy storage battery protection panel



Smart lawn mower battery protection panel



Electric sofa battery protection panel

# Cleaning household appliance series



## Characteristics

- 4-10 series have design scheme
- Man-machine interaction interface can be designed
- High level electrostatic protection design
- Brushless and brushless compatible design
- Skilled use of various sensors

## Application field

Wireless suction, wireless vacuum cleaner, wiping machine, washing machine

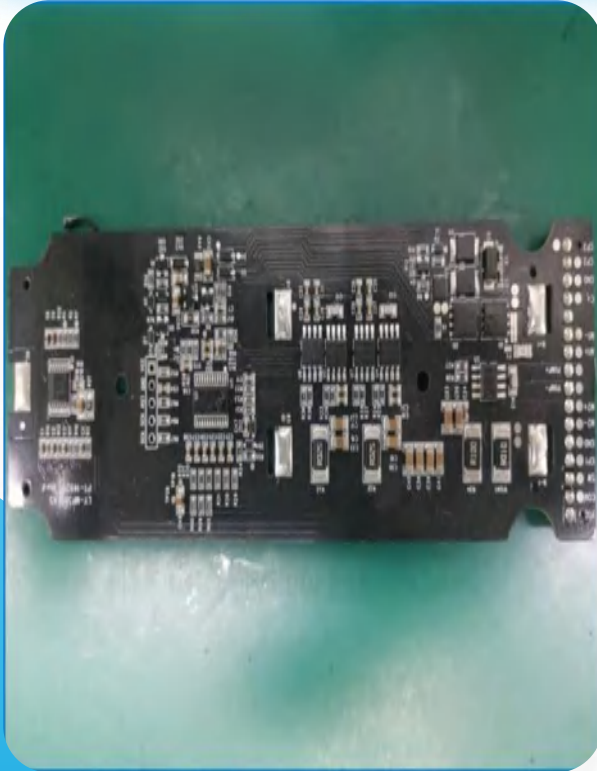
## Advantage

- 1、 There are development cases of special MCU and general MCU
- 2、 There are many successful mass production cases of brand customers
- 3、 Autonomous SOC algorithms quickly respond to customer development needs
- 4、 Low power consumption design, to meet the long-term storage

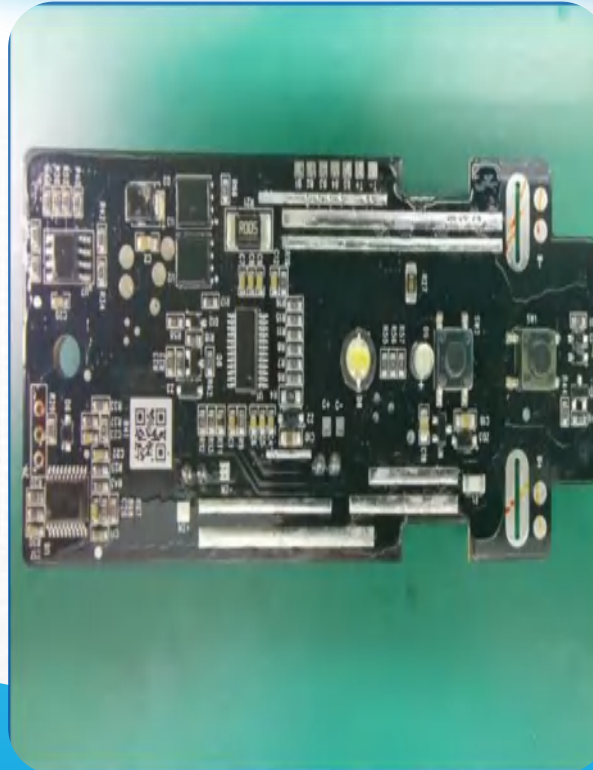


# Cleaning household appliance series

Washing machine protection control integrated board



6 strings of vacuum cleaner protection control integrated board



8 strings vacuum cleaner protection control integrated board



Home page

Directory

Company profile

Design And  
Development

Manufacturing  
system

Product  
Introduction

**Partner**

Future Planning

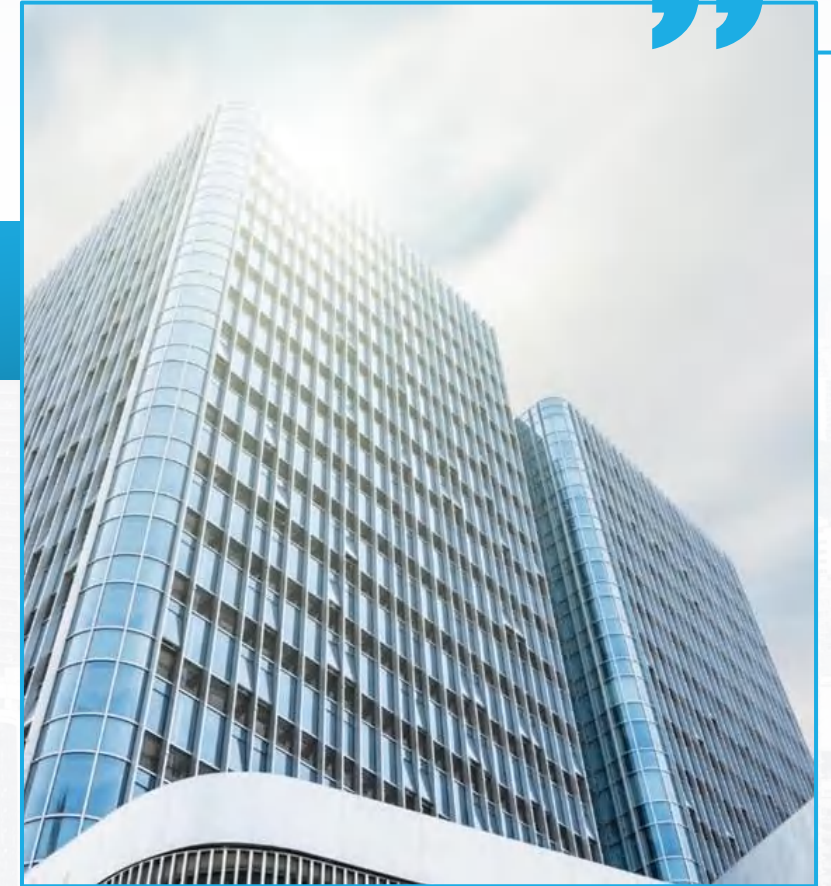
● PART05

**PART 05**

**Partner**

BMS intelligent battery management system,  
battery management solutions

PROFILE ●





# LYNNYL 凌奈智控



## 合作品牌



Home page

Directory

Company profile

Design And  
Development

Manufacturing  
system

Product  
Introduction

Partner

**Future  
Planning**

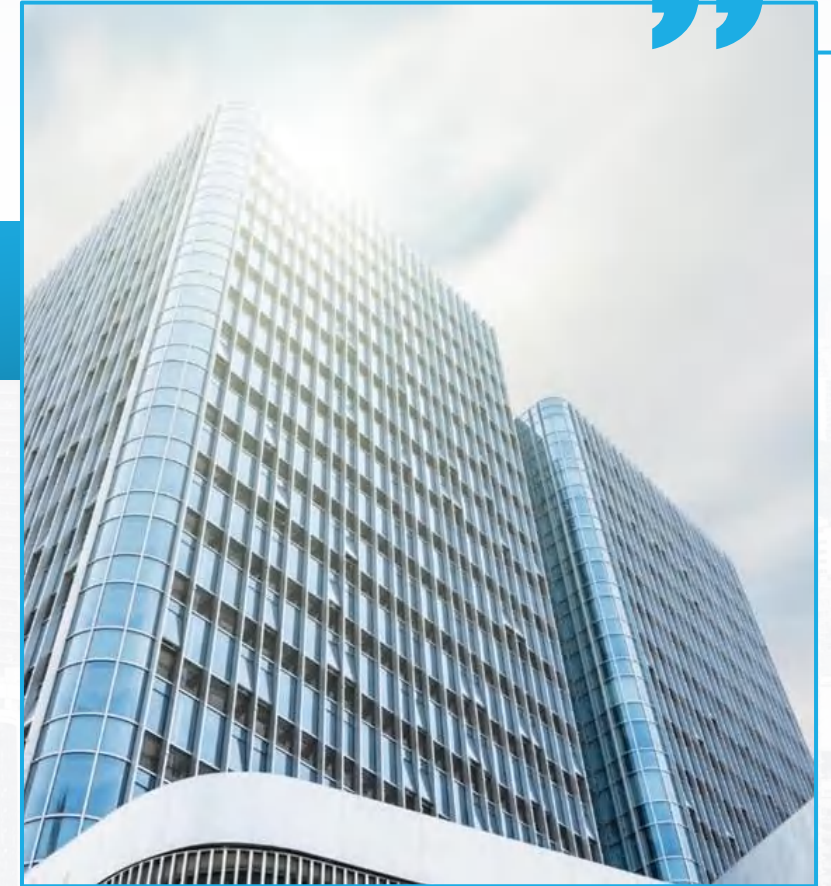
● PART06

**PART 06**

# Future Planning

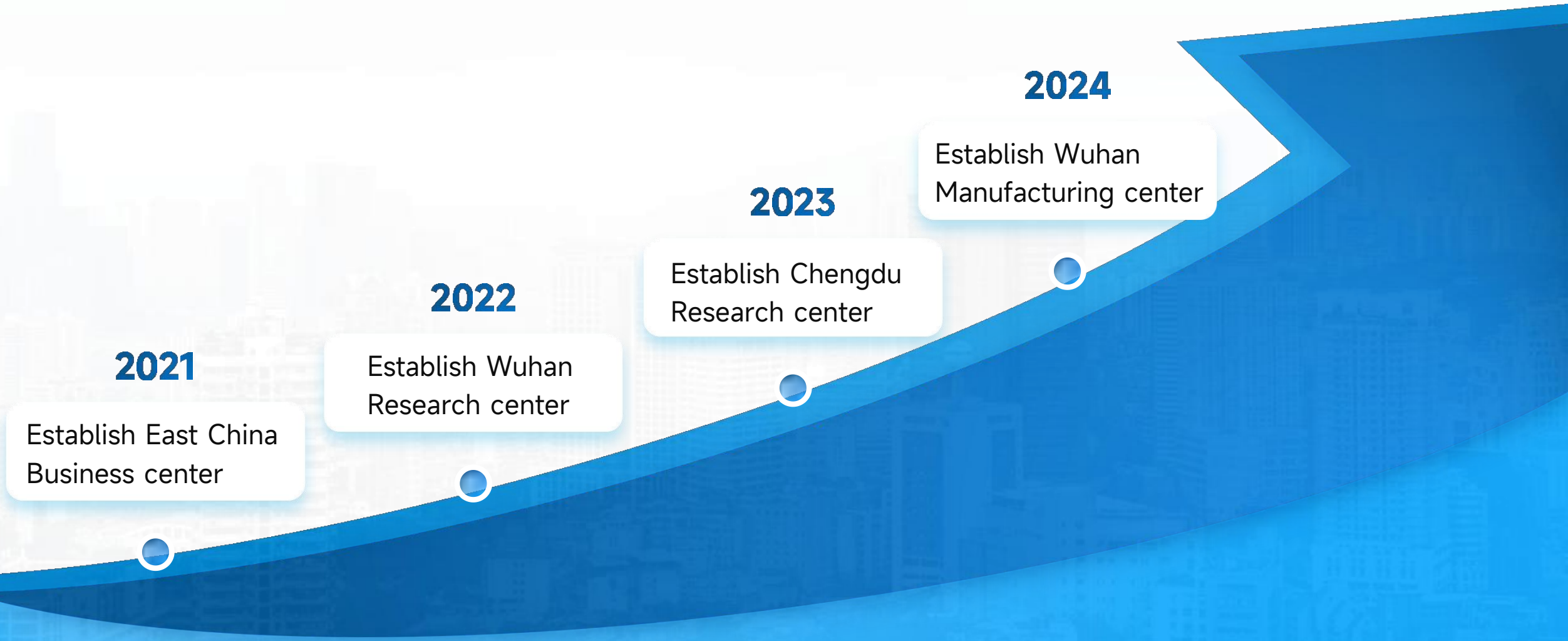
BMS intelligent battery management system,  
battery management solutions

PROFILE ●





# Future plan



**2021**

Establish East China  
Business center

**2022**

Establish Wuhan  
Research center

**2023**

Establish Chengdu  
Research center

**2024**

Establish Wuhan  
Manufacturing center

ENTERPRISE



# THANKS FOR WATCHING

 Workshop No. 2, Baoxin Science Park, Guangming District, Shenzhen

INTRODUCE



## Home page

Directory

Company profile

Design And Development

Manufacturing system

Product Introduction

Partner

Future Planning

