



Corporate Overview

ARCHITECTURE · INTEGRATION · INTELLIGENCE

HOPECHART

Beyond Product Boundaries.

Automotive-Grade Electronics for Connected Vehicles

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A complete overview of HopeChart's motorcycle electronics capabilities — from architecture and products to engineering, validation and mass production.

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ABOUT THE COMPANY

Automotive-Grade Electronics for Global OEMs

HopeChart is an automotive electronics Tier 1 supplier with 17+ years of experience in connected vehicle systems and intelligent electronics.

Serving passenger vehicles, commercial vehicles, off-highway machinery and two-wheelers, we support OEMs from architecture and development through validation and mass production.

Core Strengths:

- ✓ Platform-Based Development
- ✓ Flexible System Integration
- ✓ Production-Proven Delivery
- ✓ Automotive-Grade Engineering

YEARS

17+

Founded in 2009

R&D ENGINEERS

450+

700+ Total workforce, 59% in R&D

GLOBAL DEPLOYMENT

26

Programs deployed in 26+ countries

SHIPMENT

10M+

10M+ Units Delivered

Our Philosophy

OUR BELIEF

Beyond Product Boundaries.

We believe electronics should be designed around vehicle architecture, not fixed product categories.

OUR APPROACH

Proven. Tailored.

We combine production-proven platforms with flexible system integration to support every OEM program.

HOW WE WORK

01

Architecture First

Products are shaped by architecture, not predefined product boundaries.

02

Proven Platforms

Reuse validated hardware and software to improve efficiency and reliability.

03

Flexible Integration

Functions are integrated based on each OEM's architecture and program requirements.

04

Production Ready

Every solution is engineered, validated and delivered for mass production.

We combine production-proven platforms with flexible system integration to support different OEM architectures and program requirements.

Company Milestones

ANNUAL REVENUE (2025)

87.58 EUR Million

OPERATING INCOME GROWTH (YOY)

+33.38%

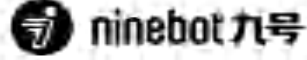
BUSINESS SEGMENTS

- Two-wheeler
- ATV/UTV
- Passenger Vehicle
- Commercial Vehicle
- Off-Highway

17 Years of Technology Evolution



Customer

Two-wheeler ATV/UTV									
									
Passenger Car									
									
Commercial Vehicle									
									
Off-Highway									
Tier 1									

* Enterprises are listed alphabetically by Pinyin, in no particular order.

Engineering Framework

Architecture

Design electronics around vehicle architecture.



Integration

Configure functions beyond product boundaries.



Platform

Build on proven hardware and software modules.



Customization

Deliver the right solution for every OEM.



Engineering
Framework

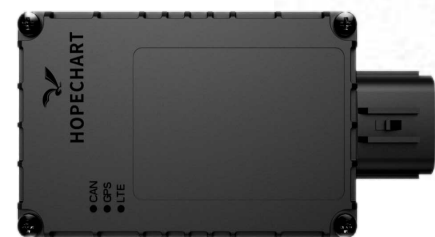
* One engineering framework. Multiple OEM solutions.

Electronic Architecture

Connectivity

Connect every ride.

- ◆ Cellular
- ◆ Wi-Fi
- ◆ Bluetooth
- ◆ GNSS
- ◆ OTA
- ◆ eCall



Cockpit

Create every interaction.

- ◆ TFT Display
- ◆ Android
- ◆ Linux
- ◆ Navigation
- ◆ HMI
- ◆ Infotainment



Vision

See beyond the road.

- ◆ Front Camera
- ◆ Rear Camera
- ◆ Driving Recorder
- ◆ AI Vision
- ◆ ADAS
- ◆ Video Streaming



Control

Control every function.

- ◆ Body Control
- ◆ Domain Control
- ◆ Gateway
- ◆ PEPS / Digital Key
- ◆ Lighting Control



Cloud

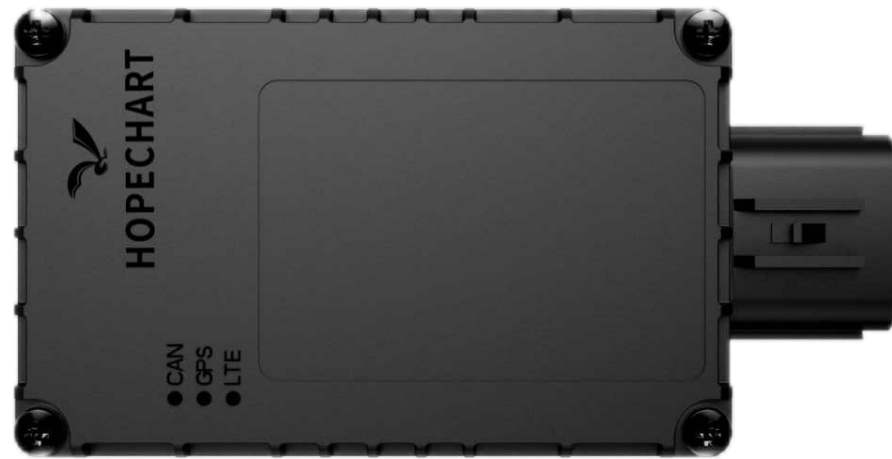
Extend beyond vehicle.

- ◆ Fleet Management
- ◆ OEM APP
- ◆ OTA Management
- ◆ Remote Service
- ◆ Data Analytics



* Building blocks for scalable OEM architectures.

Two-Wheeler Electronics Portfolio - Telematics & Connectivity



150000+

T-BOX UNITS DELIVERED

9+

OEM PROGRAMS

30+

PRODUCT VARIANTS

Function



Positioning
& tracking



Intelligent
anti-theft



One-click
searching



BT locking/
unlocking



Abnormal
alarm



Remote OTA
upgrade



Maintenance
reminder



Condition
monitoring



IOV
ecosystem



Fault
diagnosis



Personalized
parameter setting



Intelligent riding
assistance

Strength

• PRODUCTION-PROVEN PLATFORM

Mature CAT1 architecture, proven through large-scale automotive deployment.

• END-TO-END SOLUTION

Integrated connectivity and OTA capabilities for streamlined deployment.

Two-Wheeler Electronics Portfolio - Smart Cockpit

Dual-System Instrument



Standard Instrument



Android Instrument



LCD Instrument



130000+

INSTRUMENT UNITS DELIVERED

13+

OEM PROGRAMS

100+

VEHICLE MODELS

5"-7"

DISPLAY RANGE

TFT · CURVED TFT · VA LCD

DISPLAY TECHNOLOGIES

MCU · ANDROID · DUAL-OS

SYSTEM ARCHITECTURES

Function

HMI & Graphics / Navigation / Bluetooth / Wi-Fi / Smartphone Connectivity / Camera Integration / TPMS / Vehicle Network / OTA / Diagnostics

R&D Capability

Digitalization · Platformization · Standardization

01 Requirement Management

- Requirement library: Product function tree
- Requirement traceability matrix
- Requirement change management process

02 Design & Simulation

- Enterprise standards, design specifications
- Model-Based Design (MBD)
- Power Integrity (PI) simulation
- Signal Integrity (SI) simulation
- PCB thermal simulation
- Structural modal simulation

03 Data360 Indicator System

- Five major indicator systems
- Operation, quality, efficiency, team, specification
- Project management indicators: Traffic light early warning
- Real-time monitoring of cost, expense, quality, schedule, risk
- Data-driven improvement

04 Platformization & Modularization

- Hardware platformization, modularization, material standardization
- Software part: Layered decoupling
- Software platformization, modularization, architecture standardization

05 Test & Verification

- Static code inspection
- Unit testing: 100% path coverage
- Independent testing lab
- 50% test case automation
- SIL, MIL, HIL simulation
- Module testing

06 Management Systems

- Project management: Zentaopms (purchased + secondary development)
- Process management: OA (purchased + secondary development)
- Knowledge management: Confluence (purchased)
- Test management: Zentaopms (purchased + secondary development)
- Report management: Wiger (self-developed)
- DevOps: Jenkins+Gitlab+Jfrog (open source)
- ISO/SAE 21434 information security system

07 Team Development

- Experience repository & learning
- Precipitation checklist
- Read one book per month
- Learn one course every two weeks
- AI & development system (online training & examination)

R&D Capability

Core Fundamental Technology

Deep Learning



Traditional Machine Learning



Sensor Data Processing



Information Fusion



Image Processing



Big Data



Main Research Dircetion

Computer Vision

- Object Detection & Tracking
- Visual Classification & Segmentation
- Keypoint Detection
- Face & Gesture Recognition
- Human Pose Estimation
- Text Recognition (OCR)
- 3D Perception
- ...

Mobile Robotics

- Multi-Source Fusion Positioning
- Multi-Source Fusion Perception
- Intelligent Behavior Prediction
- Path Planning & Control
- V2X (Vehicle-to-Everything) Collaboration
- ...

High-Precision Positioning & Attitude Measurement

- RTK Differential Positioning
- Integrated Navigation
- UWB (Ultra-Wideband) Positioning
- RAC Positioning
- Attitude & Inclination Measurement
- ...

Intelligent Voice

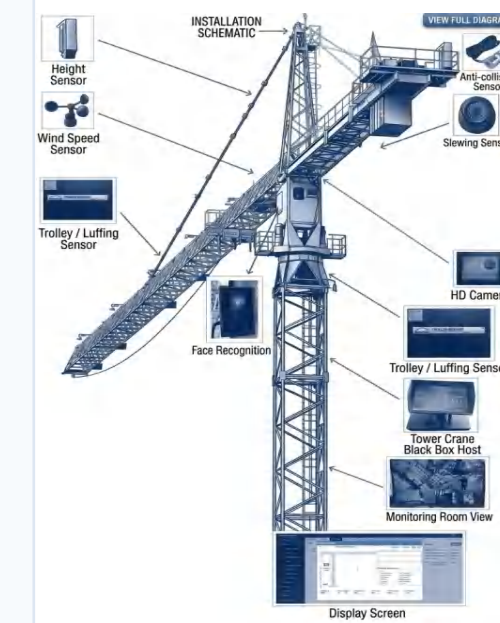
- Speech Recognition & Voice Wake-up
- Speech Synthesis (TTS)
- Audio Event Detection
- ...

Typical Product & Application

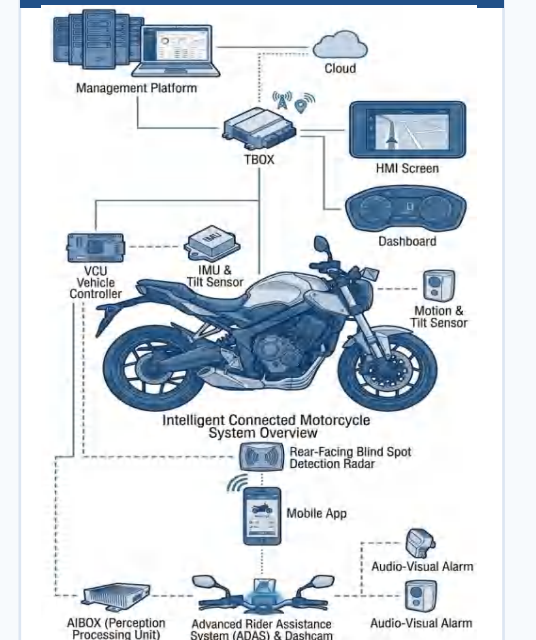
Advanced Driver Assistance System



Smart Construction

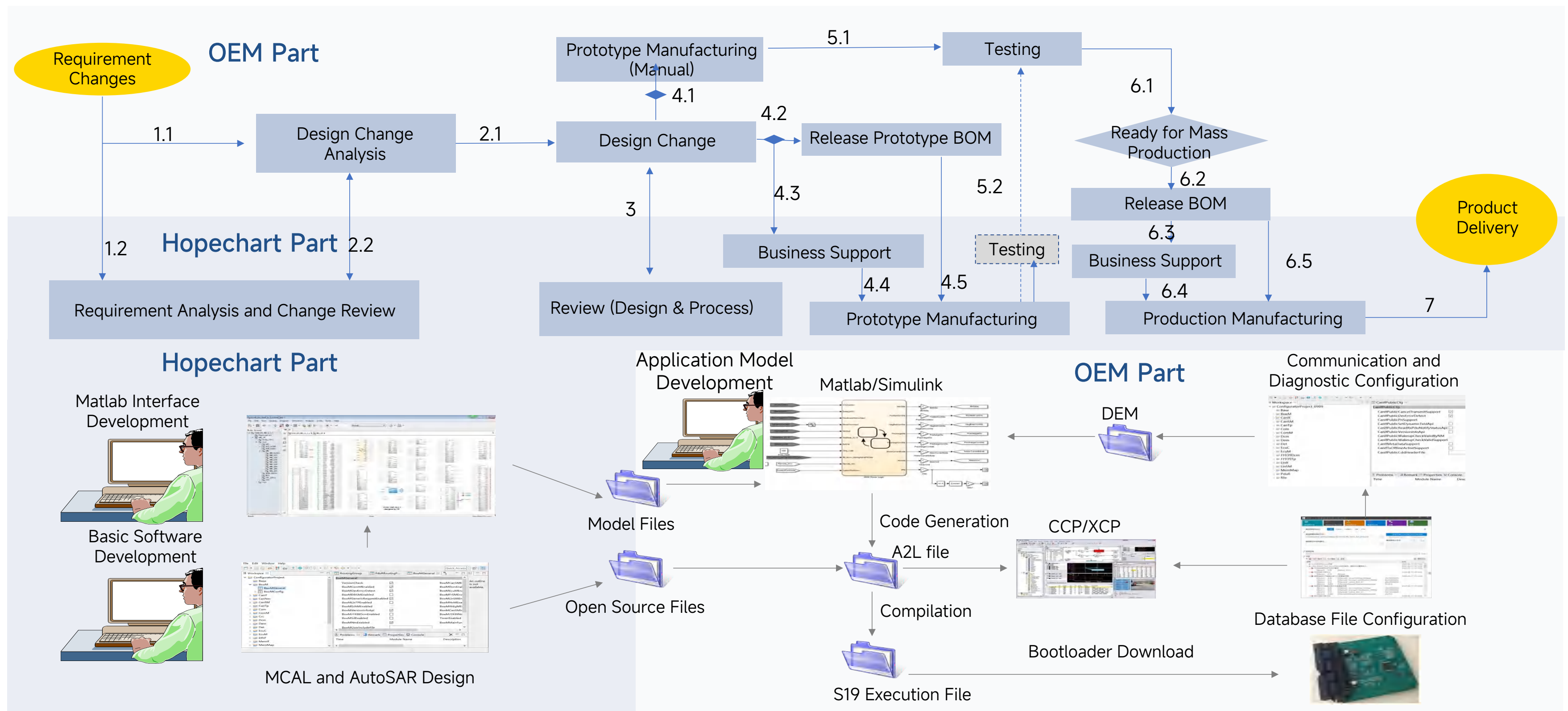


Smart Two-wheeler



R&D Capability

Cooperative Development Mode - Based on the platform design provided by Hopechart



Testing & Validation

Investment

¥ 30M+

Facility Area

1,500m²+

Available Tests

100+

Electrical Performance Test

- Load Dump Test
- Supply Voltage Range Test
- Overvoltage Test
- Superimposed AC Voltage Test
- Voltage Drop Test
- Single Line Interruption Test
- Reverse Polarity Test
- Signal Circuit Short Circuit Protection Test
- Load Circuit Short Circuit Protection Test
- Insulation Resistance Test
- ...

Environmental Reliability Test

- Sinusoidal Vibration Test
- Random Vibration Test
- Low/High Temperature Storage Test
- Low/High Temperature Operation Test
- Temperature Cycling Test
- Rapid Temperature Change Test
- Temp./Humidity Combined Cycling Test
- Waterproof Test
- Salt Spray Test
- UV/Xenon Arc Aging Test
- ...

Functional Test

- Power Consumption Test
- Continuity/Interruption Test
- ACC Switch Test
- Radio Function Test
- Reversing Camera Switch Test
- Video Recording Test
- Connectivity Test
- GPS Positioning Test
- USB/SD Compatibility Test
- Button Durability Test
- ...

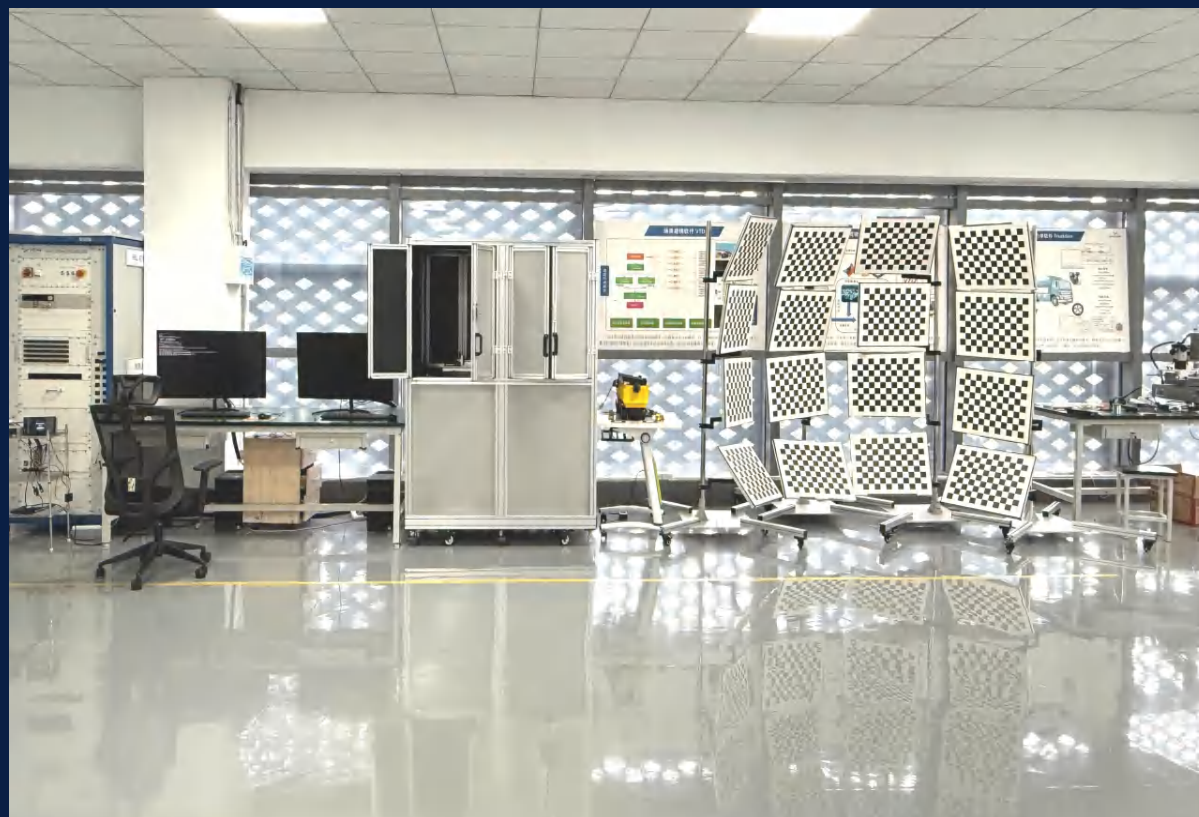
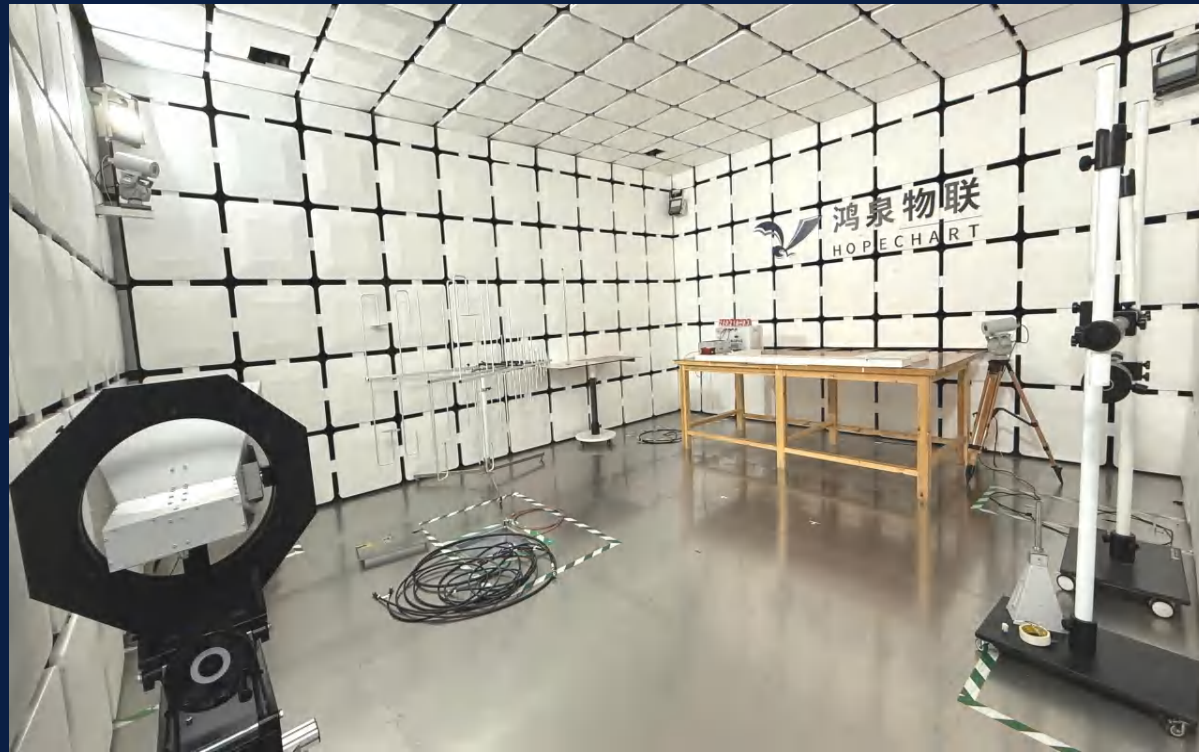
EMC Test

- Electrostatic Discharge (ESD) Immunity
- Radiated Emission
- Conducted Emission
- Radiated Immunity
- Magnetic Field Immunity
- Conducted Transient Emission
- Transient Disturbance on Supply Lines
- Transient Disturbance on Signal Lines
- Bulk Current Injection (BCI)
- Handheld Transmitter Test
- ...

LAB ACCREDITATION

SGMW; Dongfeng; Sunward; Geely Farizon; Foton; Shaanxi Auto; CNAS...

Testing & Validation



- EMC Laboratory
- Environmental Reliability Laboratory
- Electrical Performance Laboratory
- Mechanical Laboratory
- Automation Laboratory
- Optical Laboratory
- Acoustic Laboratory

Manufacturing

PLANT AREA

27k m²

ANNUAL CAPACITY

3M+

CUMULATIVE SHIPMENT

10M+

Intelligent storage system



Digital workshop



Quality management



Automation line



CERTIFICATIONS & STANDARDS



QUALITY MGMT

IATF 16949



QUALITY MGMT

ISO 9001



ENVIRONMENTAL MGMT

ISO 14001



OCCUPATIONAL HEALTH AND SAFETY MGMT

ISO 45001

Manufacturing



● SMT Workshop:

4 Automated SMT Lines

● DIP Workshop

1 Selective Wave Soldering Line, 2 Traditional Wave Soldering Lines

● Assembly Workshop

1 Fully Automated Assembly Line, 3 Semi-Automated Assembly Lines

● Packaging Workshop

1 Packaging Line



Laser Marking Machine



Pre-Reflow AOI



Post-Reflow AOI



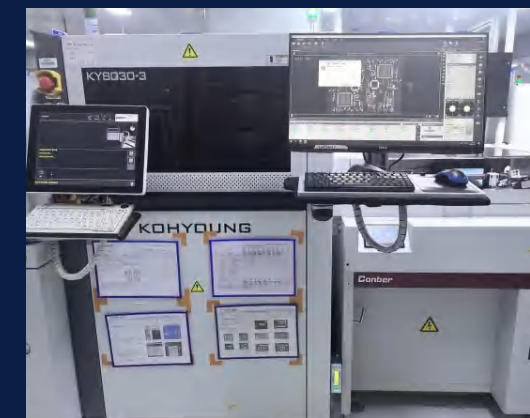
SMT placement machine



Reflow soldering



SMT down board machine



SPI



3D X-RAY device



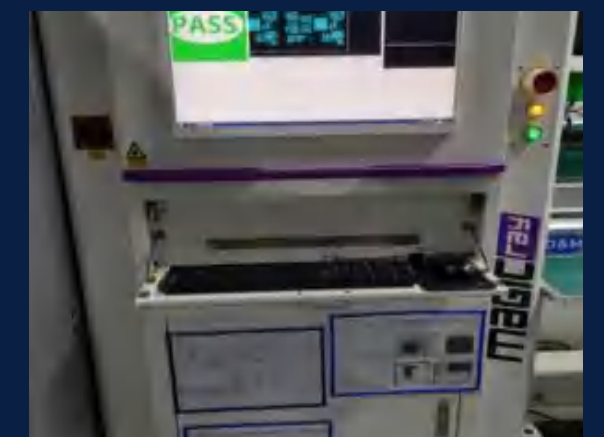
Essa selective wave soldering



Solder paste printing machine



Three anti-paint coating equipment



Solder paste printing inspection machine

Quality

QUALITY · AUTOMOTIVE

IATF 16949

Automotive Quality Management System

CYBERSECURITY · VEHICLE

ISO/SAE 21434

Road Vehicles - Cybersecurity Engineering

LAB ACCREDITATION

CNAS

National Accredited Testing Laboratory

QUALITY · GENERAL

ISO 9001

Quality Management System

ENVIRONMENT

ISO 14001

Environmental Management System

HEALTH & SAFETY

ISO 45001

Occupational Health and Safety Management System

INFORMATION SECURITY

ISO 27001

Information Security Management System

BUSINESS CONTINUITY

ISO 20000-1

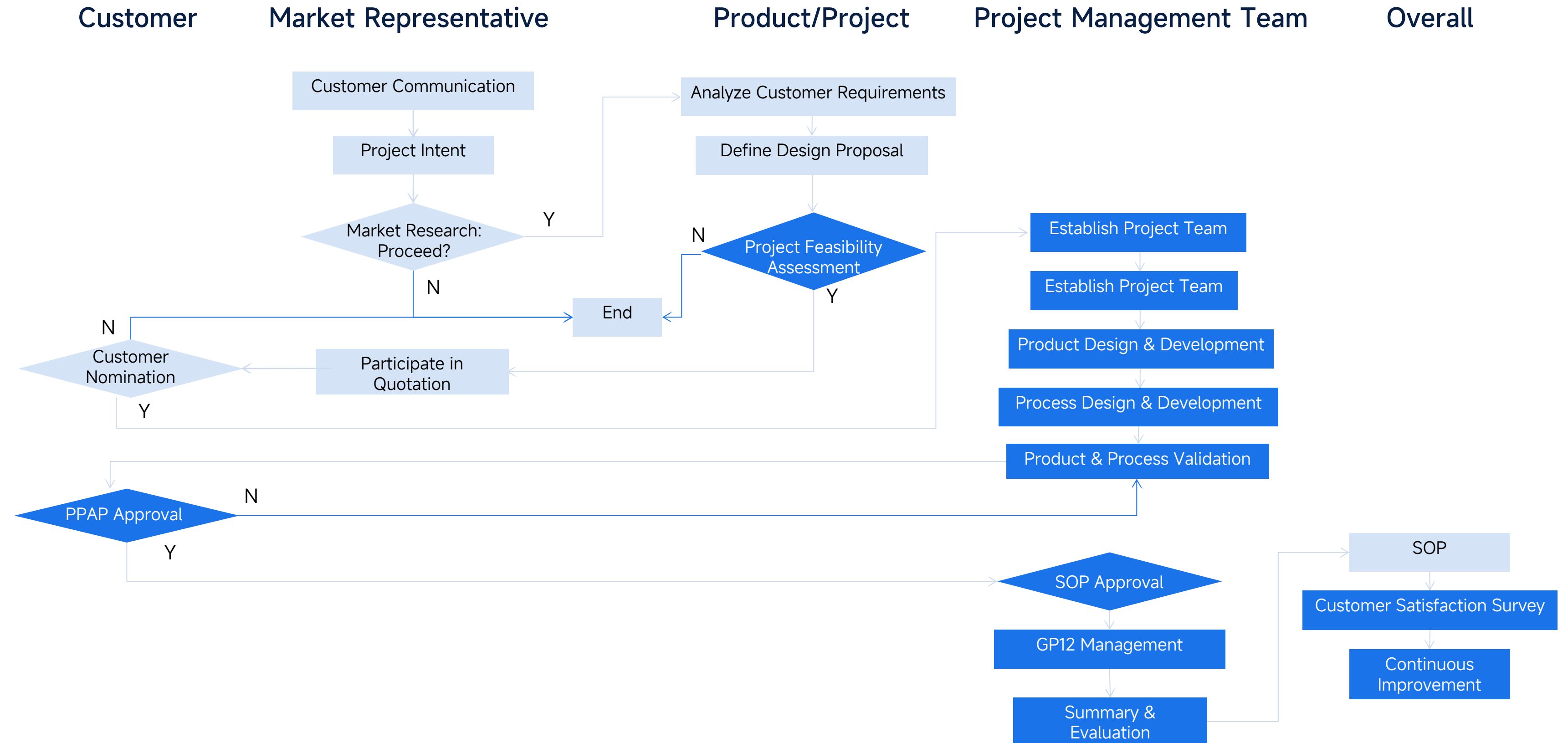
IT Service Management System

SOFTWARE CAPABILITY

CMMI Level 3

Capability Maturity Model Integration Level 3

Quality





AUTOMOTIVE · ELECTRONICS · CONNECTIVITY

THANK YOU!

Beyond Product Boundaries.

Automotive-Grade Electronics for Connected Vehicles

■ GET IN TOUCH

HEADQUARTERS

No.35 Qizhi Street, Binjiang District
Hangzhou, 310051 · China

BUSINESS ENQUIRIES

marketing@hopechart.com
+86 0571 88963823

WEB

www.hopechart.com

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