Your PCBA Smart Manufacturing Base

One-stop electronics manufacturing — solution design, turnkey PCBA and finished-product assembly, delivered from three sites in Shenzhen, China.

Lower total cost | Consistent quality | Short lead times

1,500+	20,000 m²	21	10,000+
people	three sites	SMT lines	customers

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ONE PARTNER

Design, components, SMT, DIP, test, coating, assembly and packaging — under one roof, under one schedule.

ONE STANDARD

Eight certified management systems and five published process commitments applied to every build.

ONE CONTACT

A named engineer and account manager from enquiry through after-sales.

01 / COMPANY PROFILE

Who we are

Founded in 2012, **Shenzhen JKR Precision Technology Co., Ltd.** is a one-stop smart-manufacturing enterprise specialising in solution development, turnkey PCBA and finished-product assembly.

We employ more than **1,500 people** across **three production sites** totalling **20,000 m²**, equipped with **21 high-speed SMT lines**, 7 automated insertion lines, 13 multi-function test lines, 3 automatic conformal-coating lines and 36 assembly lines.

Since inception we have integrated the upstream, midstream and downstream of the electronics supply chain, serving more than **10,000 customers** worldwide across industrial, automotive, medical, telecommunications, security, consumer, new-energy, robotics, commercial-display, medical-aesthetics, smart-home and smart-kitchen electronics — a closed-loop ecosystem built on **high quality, short lead times and cost efficiency**.



Headquarters Building A12, Longwangmiao Industrial Park, Baishixia Community, Fuyong Subdistrict, Bao'an District, Shenzhen



Manufacturing base Building D, Zone OA-04, Fenghuang Third Industrial Zone



Assembly base Building A8, Longwangmiao Industrial Park

Design + manufacturing

One team from schematic to shipped carton.

12 application sectors

Industrial, automotive, medical, consumer, robotics and more.

Closed-loop ecosystem

Components, board build and assembly inside one group.

14 years of series builds

Repeat orders from brands that audit their suppliers.

01 / COMPANY PROFILE

At a glance

Fourteen years of steady growth has turned a single PCBA workshop into an integrated electronics supply-chain platform — design, components, manufacturing and assembly delivered by one accountable partner.

2012
Founded in Shenzhen — 14 years in electronics manufacturing

1,500+
Employees across engineering, production and quality

20,000 m²
Three production sites in Bao'an District

21
High-speed SMT lines, 7 automated insertion lines

13
Multi-function test lines, 3 conformal-coating lines

36
Assembly lines for finished-product builds

10,000+
Customers served worldwide

1 bn+ RMB
Annual business volume, growing since 2012

Scale you can book

Capacity is published, not guessed — your planner can commit a launch date against it.

Depth, not just size

Design, components, board build and assembly sit in one group, so a shortage has one owner.

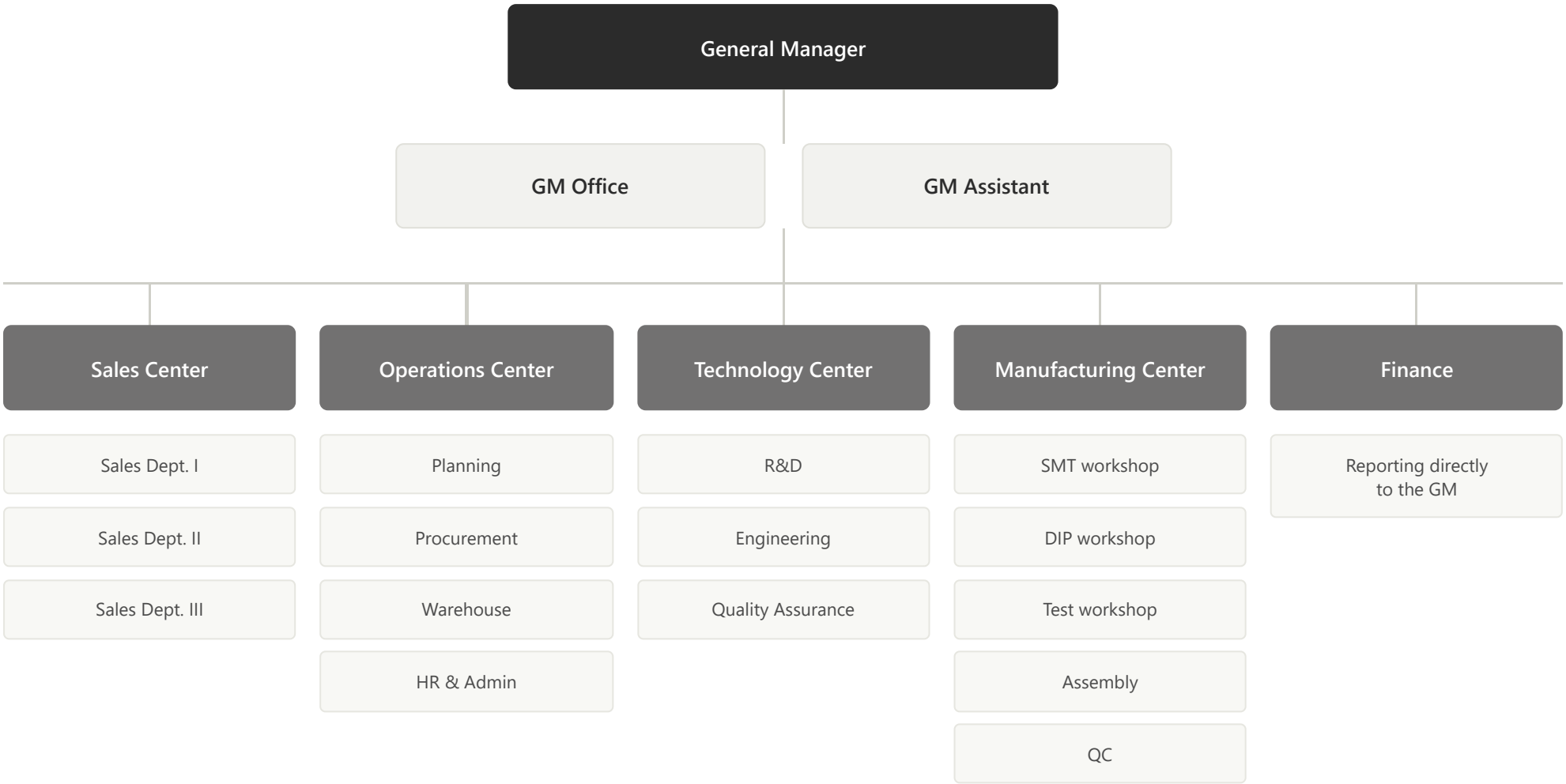
Built for repeat orders

Most of what we ship each year is a product we have built before.

01 / COMPANY PROFILE

Organization

Four operating centres under one general manager: sales owns the customer relationship, technology owns the process, manufacturing owns delivery, and operations keeps material and capacity aligned.



01 / COMPANY PROFILE

What drives us

MISSION

Empower the electronics supply chain and make manufacturing effortless — to become the most influential smart-manufacturing enterprise in our industry.

VISION

To power innovation and growth across the electronics information industry.

VALUES

Mutual benefit. Win-win. Openness. Innovation.

CULTURE

Customer first. Altruism before self-interest. Service with care. Success built together.

THE TEAM BEHIND THE PROMISE

40+	30+	1,300+	1bn+
R&D engineers	Commercial team	Manufacturing staff	RMB annual volume

A dedicated engineer, a named account manager and a line supervisor are assigned to every project. Nothing is handed between anonymous departments — the people who quote your build are the people who run it.

02 / HONORS & QUALITY

Honors

Independent recognition of manufacturing discipline, technical depth and financial standing — the credentials buyers audit first.



Specialised, Refined, Distinctive & Innovative SME
Shenzhen SME Service Bureau — deep technical focus



Innovative SME
Recognised for R&D investment and proprietary technology



National High-Tech Enterprise
Certified high-tech enterprise status



Shenzhen Green Factory (first batch)
Shenzhen Bureau of Industry and Information Technology



Executive Director Unit
Industry association executive-director membership



AAA Credit Rating Enterprise
Enterprise credit evaluation, AAA grade

02 / HONORS & QUALITY

Patents

Four invention patents and one design patent, all granted by the China National Intellectual Property Administration — covering feeding, placement, material handling and soldering fixtures used on our own lines.



Invention patent
Nozzle feeding mechanism for a board placement machine



Invention patent
Placement machine for PCB assemblies



Invention patent
Automated reel storage device for SMT lines



Invention patent
Clamping and flipping fixture for double-sided soldering



Design patent
Display mounting enclosure

Patent numbers and full specifications are available on request.

02 / HONORS & QUALITY

Quality system

Eight management systems audited by third parties, and five measurable process commitments we publish to customers.

ISO 9001
Quality management

IATF 16949
Automotive quality

ISO 13485
Medical devices

ISO 14001
Environmental

ISO 45001
Occupational health & safety

ISO 50001
Energy management

IECQ QC 080000
Hazardous-substance process

GB/T 39604
Social responsibility

PROCESS COMMITMENTS

> 1.33	< 200	> 99%	≤ 1,000	> 90
Solder-paste printing Cpk	PPM after reflow	QA first-pass yield	PPM at customer line	Customer satisfaction score

Figures are internal control targets for series production and are reported to customers in monthly quality reviews.

Audited, not self-declared

Each system is certified by an accredited third-party body and re-audited on its cycle.

Written into the build

Requirements become process parameters, inspection points and acceptance records on the line.

Available to your audit

Certificates, control plans and quality records are shared during supplier audits.

02 / HONORS & QUALITY

Digital control, order to shipment

ERP — KINGDEE K3 CLOUD

One ledger for money, material and information

- Digital, real-time management of logistics, cash flow and information flow across the whole company.
- Standardised purchase–sales–inventory, production planning and finance processes, so every order follows the same route.
- Live monitoring of supply-chain data with immediate feedback, allowing corrections before a deviation reaches your line.

MES — SHOP-FLOOR EXECUTION

Every board traceable, every step checked

- Integrated equipment management: hardware and MES software work together to lift the efficiency of every process, shortening ramp-up and shipment.
- Digital management and traceability from raw material to finished goods — including which line, which machine and which operator.
- Transparent, real-time control of the whole build. Quality gates enforce poka-yoke against wrong parts, missing parts and process drift.

Traceability

Material lot, machine, program and operator recorded per unit.

Poka-yoke at every gate

Wrong, missing or reversed parts are blocked by the system, not by memory.

Data you can audit

Quality records retrievable by serial number, months after shipment.

02 / HONORS & QUALITY

After-sales

Two service models — return-to-factory and on-site support — chosen according to how critical the failure is to your production.

RETURN TO FACTORY

Root-cause repair, not board swapping

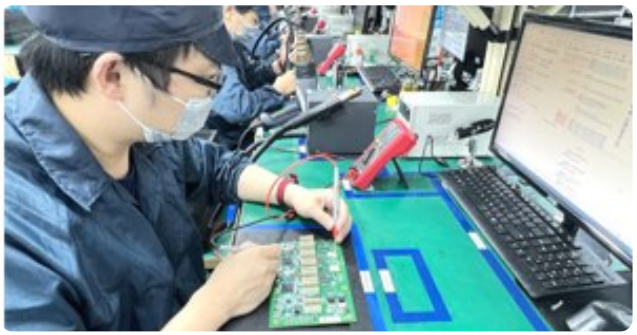
1. Returned units are diagnosed on in-house precision instruments (AOI, X-ray and others) using a standardised flow, so the repair is complete rather than symptomatic.
2. Common failure modes across returned batches are analysed centrally and fed back into process or material selection — each case improves the next build.
3. Complex faults that need design, material and process teams together are resolved internally and fast, because all three sit in the same building.

ON-SITE SUPPORT

Engineers at your line

1. First-response on site, with no waiting for logistics or a production slot — minimising downtime on your line.
2. We know your equipment, process and operating habits, so the board can be tuned for compatibility instead of blamed for it.
3. Scheduled inspection plus real-time monitoring of temperature, humidity and voltage fluctuation catches risks before they become batch failures.
4. On-site training for your operators, and direct collaboration with your R&D team to close design defects quickly.







03 / SOLUTION DEVELOPMENT

From your idea to a shippable product

Our R&D team exists to land your concept. Tell us what the product should do and we provide one-to-one custom development — hardware, firmware, mechanical and manufacturing engineering in one team.

Consumer electronics | Smart home | Smart industry | Security products | Medical & aesthetics | New energy | Automotive electronics

HOW A PROJECT RUNS

Project enquiry › Requirement review › Proposal & quotation › Contract › Design & development › Prototyping › Validation & delivery

Hardware + software, one team

Schematic, layout, firmware and test-jig design developed together, so interfaces are resolved on paper instead of on the line.

Design for manufacture

DFM review against our own SMT and DIP capability — the design is written for the line that will build it.

Prototype to series

The same engineers carry the project from first sample to mass production, so nothing is lost in the handover.

03 / SOLUTION DEVELOPMENT

One-stop service

Four capabilities under one roof. You deal with one supplier, one schedule and one quality standard — from bare board to boxed product.

01

PCBA design

Hardware and software engineers available to you throughout the project — schematic, layout, firmware and test strategy.

02

Turnkey PCBA

Component sourcing and purchasing, part selection and one-stop BOM kitting from 200,000+ in-stock SKUs.

03

SMT & DIP

Placement, through-hole insertion, post-soldering, firmware programming and testing, PCBA electrical repair.

04

ODM assembly

Assembly, functional test, burn-in, laser marking, potting, ultrasonic welding, packaging and shipping.

WHAT THIS REMOVES FROM YOUR SIDE

- Chasing four vendors for one schedule and absorbing every slip between them.
- Material shortages discovered the week before build — BOM risk is reviewed at quotation.
- Quality disputes where the board house, assembler and component supplier each point elsewhere.

WHAT YOU KEEP

- Ownership of the design, BOM and test specification.
- Direct access to the engineer running your build, not a ticket queue.
- Full traceability records per serial number for your own audits.

3–5	0201	200k+	8
working days, material in to board out	smallest SMD package placed in series	component SKUs held in stock	certified management systems behind the build

03 / SOLUTION DEVELOPMENT

A dedicated engineer on every project



Every project is assigned a **senior technical engineer** who joins from the moment the order enters the company and stays with it to shipment.

That engineer owns the three standards your product is judged against:

01

Material purchasing standard

Which grade, which brand, which authorised channel — and what substitutes are acceptable.

02

Production and test standard

Process parameters, test coverage, fixture design and the pass criteria used on your build.

03

Packaging and transport standard

ESD packaging, moisture control, carton and labelling — matched to how the goods actually travel.

The result: every link in the chain — production, testing and after-sales — runs efficiently, accurately and safely, instead of being improvised per order.

03 / SOLUTION DEVELOPMENT

In-house laboratory



We do not send samples out to certify a process we are still tuning. A full test laboratory sits inside the plant, staffed by full-time test engineers.

Professional

Dedicated test engineers and application-specific instruments, not shared equipment borrowed from production.

Full life-cycle coverage

Instruments span raw material, semi-finished PCBA and finished product validation.

Standards-based

Test methods follow international, national and industry standards, so results are comparable with your own qualification.

Controlled operation

Operating procedures and process control meet the accreditation requirements of domestic and international laboratories.

03 / SOLUTION DEVELOPMENT

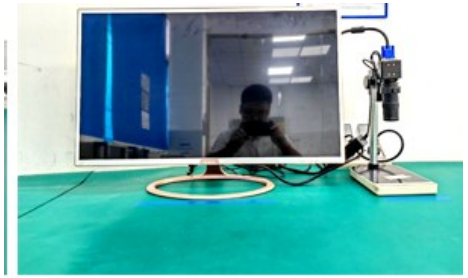
Laboratory equipment 1/3



LCR meter



Electro-acoustic device tester



High-magnification inspection lens



Touch ESD simulator



Bluetooth tester



Digital storage curve tracer



Artificial mains network



Spectrum analyser

03 / SOLUTION DEVELOPMENT

Laboratory equipment 2/3



Salt spray test chamber



RoHS spectrometer (XRF)



Variable-frequency AC source, 30 kVA



2D vision measuring machine



Thermal shock chamber



Temperature & humidity chamber



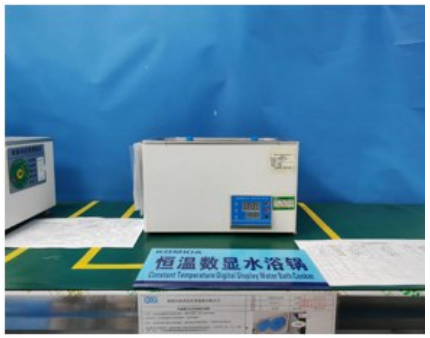
Hot-air ageing / life test chamber



Vibration test system

03 / SOLUTION DEVELOPMENT

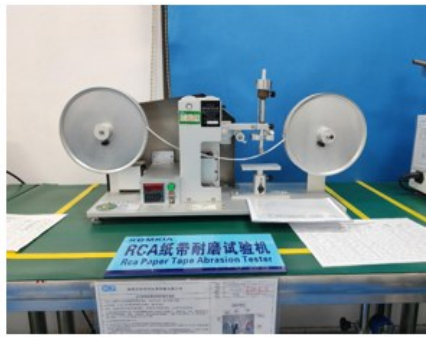
Laboratory equipment 3/3



Constant-temperature water bath



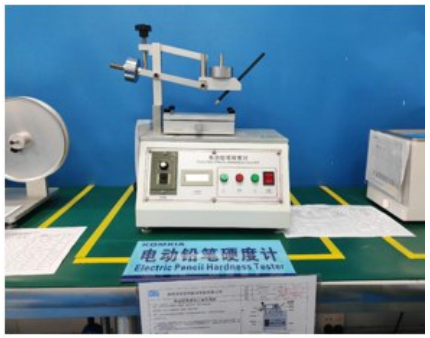
Insertion & extraction force tester



RCA tape abrasion tester



AC/DC hipot & insulation tester



Electric pencil hardness tester



Alcohol abrasion tester



Drop tester



Cable flex tester

03 / SOLUTION DEVELOPMENT

What we build

Eight application areas, each with its own test profile, component set and compliance expectations. Representative products are listed below.

Smart home

Smart curtains · Robot vacuum · Smart pet devices · Smart hotel door control · Smart sensing systems

Consumer electronics

Bluetooth speakers · Mini fans · Wireless chargers · Massage chairs · Vending machines · Heating products · Hair dryers

Robotics

Educational robots · Pool-cleaning robots · Adhesive-dispensing robots · Exoskeleton robots · Delivery robots

Smart industry

Industrial PCs · Line-inspection robots · Ultrasonic cleaners · PLC controllers · Toxic-gas sensors · Hydrogen sensors · IR propane sensors

Security

Smoke detectors · Access-control alarms · Smart surveillance · Smart locks · Fire monitoring

Medical & aesthetics

H. pylori analysers · E. coli analysers · Intimate-care devices · Patient monitoring · Dental-care devices · Beauty devices

New energy

EV charging piles · Fuel dispensers · Wind power · Inverters · Energy-storage cabinets

Automotive electronics

In-car fragrance generators · Center consoles · Wireless charging · Automatic door control · Fuel-valve control · Communication modules

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If your product is not on this list, that is normal — roughly half of what we build each year is a board we had never seen before.

Tell us the application, the environment and the volume, and we will tell you what the build needs: material specification, test coverage, coating and compliance.

03 / SOLUTION DEVELOPMENT

Turnkey PCBA — representative builds

A selection of boards we build turnkey: components sourced, SMT and DIP completed, programmed, tested and shipped to the customer's own quality standard.



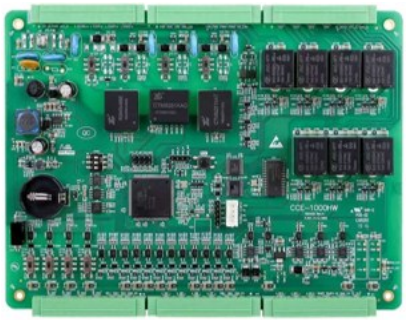
Medical
Multi-layer control board with isolated supplies and shielded analog front end



Energy storage
Power board with high-current relay switching and reinforced clearance



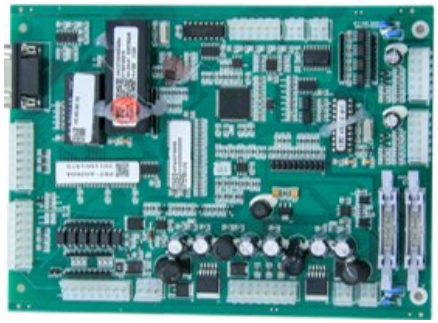
Sensors
Sensor interface board with RF module and precision front end



Industrial
Industrial control board with isolated I/O and wide-temperature parts



Consumer
High-density consumer board with wireless module and audio path



Commercial
Commercial-grade board with multi-interface connectivity

03 / SOLUTION DEVELOPMENT

Finished-product assembly — representative builds

Beyond the board: mechanical assembly, functional test, burn-in, potting or ultrasonic welding, laser marking and retail-ready packaging.



Smart pet water fountain



High-speed hair dryer



Retro Bluetooth speaker



IPL hair-removal device



Commercial service robot



Pool-cleaning robot

04 / COMPONENT PROCUREMENT

Component platform

Long-term partnerships with more than 10,000 brand manufacturers and authorised distributors, backed by a 2,000 m² warehouse holding 200,000+ SKUs in stock.

MORE

Stock, not promises

200,000+ SKUs held on site — long-tail parts available without a four-week factory lead time.

FASTER

4-hour dispatch

Smart warehouse operations release in-stock material within four hours of confirmation.

BETTER

Authorised channels only

Sourced exclusively from manufacturers and franchised distributors, traceable to the original factory.

SAVING

Transparent pricing

Clear unit pricing and one-stop purchasing that removes the time cost of split sourcing.

SERVICES

- Component selection and cross-reference support at design stage.
- BOM kitting — one delivery, one invoice, one shortage list.
- Overseas sourcing for parts unavailable in the domestic market.
- Long-term supply agreements and buffer stocking for series production.

TRACK RECORD

More than **3,000 electronics companies, engineering teams and R&D institutes** have used this platform for component selection, purchasing, BOM kitting and overseas sourcing.

2,000	200k+	3,000+
m² warehouse	SKUs in stock	clients served

04 / COMPONENT PROCUREMENT

Authorised brands, genuine parts

A representative selection of the manufacturers and franchised distributors we buy from. Every part ships with original-factory traceability.



No grey-market stock

We do not buy from open-market brokers, which is where

Traceable to the factory

Lot and date-code records are kept per delivery so a part can

Lifecycle checked

End-of-life and allocation risk is flagged at quotation, not after

05 / SMART MANUFACTURING

SMT & PCBA services

Turnkey BOM material procurement, SMT placement, DIP insertion and post-soldering, firmware programming and test, PCBA electrical repair, conformal coating, assembly and packaging.

Professional

Panasonic high-speed placement, SPI, AOI, X-ray inspection, MES and a plant-wide ESD system.

Service

Programming and burn-in test, PCBA electrical repair, assembly, and SMT service for customer-supplied parts.

Convenient

BOM purchasing plus our own PCB partner network — a single one-stop solution.

On time

Material in, board out in 3–5 working days, with the delivery date committed at order.

PROCESS CAPABILITY

PCB size	**50 × 50 – 350 × 250 mm**
PCB thickness	**0.4 – 4.0 mm**
SMD component size	**0201 – 45 mm**
Minimum IC pitch	**0.35 mm**
Maximum component height	**15 mm**
Placement accuracy	**Chip ±0.04 / IC ±0.035 mm**

05 / SMART MANUFACTURING

Workshop capacity

Published daily capacities and the people behind them — the numbers your planning team needs to schedule a launch.

SMT

33 million points / day

High-speed placement, GKG screen printing, SPI solder-paste inspection, nitrogen and standard reflow, AOI and X-ray.

DIP

800,000 points / day

Post-soldering capacity 60,000 PCBA sets per day; test capacity 60,000 PCBA per day; insertion AOI, automatic potting and smart conformal coating.

ASSEMBLY

50,000 – 150,000 pcs / day

Assembly, packaging and complete-unit processing, with dedicated test instruments and line-side equipment.

QUALITY HEADCOUNT

5 QA management	38 Inspectors	4 IQC
12 IPQC	3 FQC	4 OQC

ENGINEERING HEADCOUNT

5 Management	32 Engineers	20 Technicians

Every shift runs with a named supervisor and a certified inspector.

ESD MANAGEMENT

A plant-wide static-control system continuously monitors whether every operator’s wrist strap is worn and grounded — the most common silent cause of latent field failures.

05 / SMART MANUFACTURING

PCBA production flow

Three controlled stages, each with its own first-article approval and in-process inspection — documented as a controlled procedure, not a shop-floor habit.

SMT
SURFACE MOUNT

Material baking › Solder-paste printing › 3D SPI › Placement › Incoming inspection › Reflow › AOI › X-ray

DIP
THROUGH-HOLE

Fixture loading › Insertion › Component AOI › Wave soldering › Lead trim & depaneling › Post-solder touch-up › Solder-joint AOI

Test & pack
VALIDATION

Voltage / current test › Firmware programming › Function test › Burn-in › Conformal coating › Final inspection › Packing & warehousing

SMT parameters
Machine parameters are recalled per product; the first article is confirmed before the run continues.

DIP fixtures
Soldering fixtures are made per product and components are pre-formed, so short-pin defects are designed out.

Coating & burn-in
Coating fixtures are prepared in advance; burn-in follows a set temperature and duration with before/after functional comparison.

05 / SMART MANUFACTURING

Production equipment 1/2



Panasonic NPM placement machines × 10



Automatic solder-paste printers × 18



3D SPI inspection × 16



Panasonic high-speed placement × 26



Smart first-article inspection × 2



Pre-reflow AOI × 6



Smart reflow ovens × 8 · nitrogen × 2



Post-reflow AOI × 13

05 / SMART MANUFACTURING

Production equipment 2/2



X-ray component counters × 2



X-ray inspection systems × 2



Pre-DIP AOI × 5



Computerised wave-soldering × 7



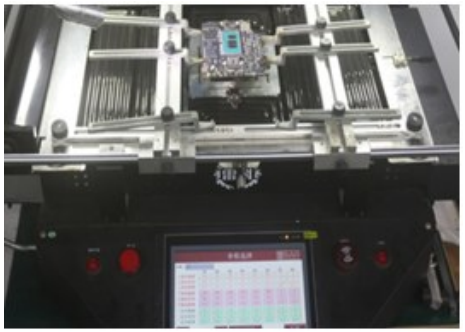
Post-DIP AOI × 5



Automatic conformal-coating lines × 3



PCB laser markers × 2



BGA rework station

05 / SMART MANUFACTURING

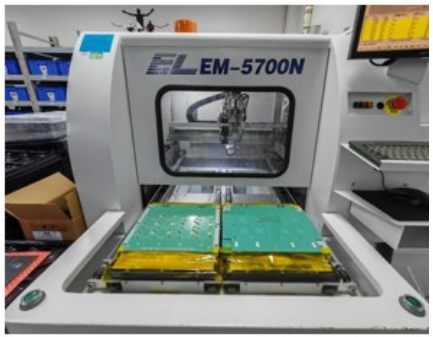
Auxiliary equipment



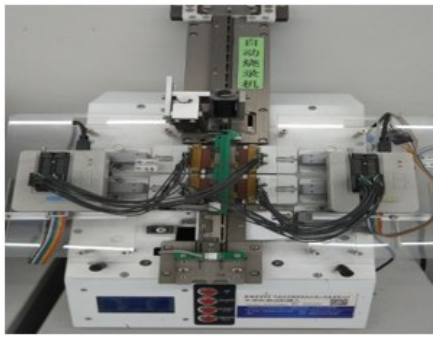
Dry-ice cleaning machine



4G module calibration instrument



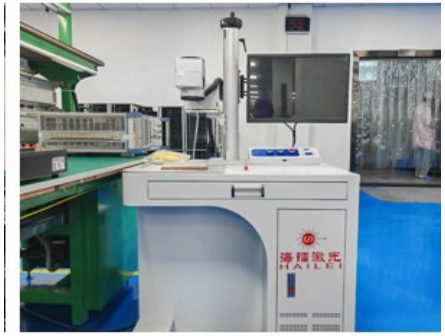
Router depaneling machine



Automatic programming machines × 2



Wi-Fi test system



Laser marking machine



Heat-shrink machine



Battery test system

05 / SMART MANUFACTURING

People and environment

Clean, controlled, organised production space — and the reason it stays that way: supervisors and engineers on the floor, not in an office.












Factory environment

EPA-controlled workshops, visual management and 5S discipline.

Professional team

Trained operators and certified inspectors on every shift.

In-line operation

Standard work instructions at each station, audited daily.

Experienced engineering

Senior engineers own the process, not just the paperwork.

CUSTOMERS

Trusted by brands that audit hard

From state-owned energy groups to consumer brands and research universities — a customer base built on repeat series orders rather than one-off samples.



06 / CONTACT

Let’s talk about your next build

Shenzhen JKR Precision Technology Co., Ltd.

HEADQUARTERS

Building A12, Longwangmiao Industrial Park, Baishixia Community, Fuyong Subdistrict, Bao’an District, Shenzhen, Guangdong, China

ASSEMBLY BASE

Building A8, Longwangmiao Industrial Park, Baishixia Community, Fuyong Subdistrict, Bao’an District, Shenzhen

MANUFACTURING BASE

Building D, Zone OA-04, Fenghuang Third Industrial Zone, Fuyong Subdistrict, Bao’an District, Shenzhen

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Send us a BOM, a Gerber set or even a rough product concept. We will come back with a manufacturability review, a quotation and a delivery date — usually within two working days.

Empowering the supply chain, making manufacturing effortless.