

The GIEC logo is located in the top left corner, featuring the letters "GIEC" in white on an orange square background. A small branch with green leaves is visible to the left of the logo.

GIEC

The background of the slide features a low-angle shot of a modern glass skyscraper with the GIEC logo at the top, set against a blue sky with white clouds. A large, stylized graphic of a blue and orange diagonal line cuts across the center of the image. In the bottom right, there is a faint, grey-scale image of another building.

GIEC 杰科

# 公司简介

COMPANY INTRODUCTION

深圳市杰科数码有限公司  
SHEN ZHEN GIEC DIGITAL CO.,LTD



# Company Introduction

ShenZhen GIEC digital co.,LTD was established in 1999. With a registered capital of 65 million yuan, it is a national high-tech enterprise that integrates the research and development, production, and sales of digital audio-visual and information technology products. Product lines including IOT Smart home, industrial tablet, edge computing terminal, OTT box, IP Camera, AI speaker and etc.

GIEC Industrial Park is located in Longgang International Low Carbon City, covering an area of 150000 square meters. It currently has over 200 R&D engineers and more than 1500 skilled employees, providing one-stop services from ID design to software, mechanical and hardware development, as well as production, manufacturing, and after-sales for global customers. GIEC's products have won the favor of domestic and foreign markets with quality, reputation, and service, serving customers in more than 30 countries and regions such as Europe, the Middle East, America, Asia, and Africa.

GIEC AIoT products include embedded mother-board, industrial display/AI computing terminal, educational tablet, IoT control panel, PDA and other products. The product architecture covers ARM and X86 platforms, and we are committed to providing professional ODM/OEM services to customers. In the future, GIEC AIoT is committed to becoming a leading provider of embedded technology and solutions in the industry.





# Development Milestone

**1999**

GIEC Foundded



**2003**

Signed with Andy Lau and Hu Xinger as brand spokespersons; Winning the prime time advertising space on CCTV



**2005**

Fully expanded DVB overseas markets



**2008**

The industry's first release of online movie players, as the earliest prototype of OTT BOX



**2009**

Established OTT/IPTV product line. Collaborated with numerous well-known clients in the industry



**2010**

Obtained national high-tech enterprise qualification and established Audio&Video product line



**2011**

Entered the Top 200 Brands of Chinese Electronics Enterprises



**2013**

Entered the tablet field and won the "China Strategic Partner Award" from Intel and Microsoft for several consecutive years



**2014**

The groundbreaking ceremony of GIEC Industrial Park was grandly held.



**2017**

Fully entered the field of AI intelligent speakers and IoT intelligent products.



**2018**

GIEC Industrial Park Completion Ceremony Grandly held, marking the progress of GIEC  
Entered a new era of rapid development



**2021**

Expanded the IPC product line and established cooperation with many well-known enterprises in the industry

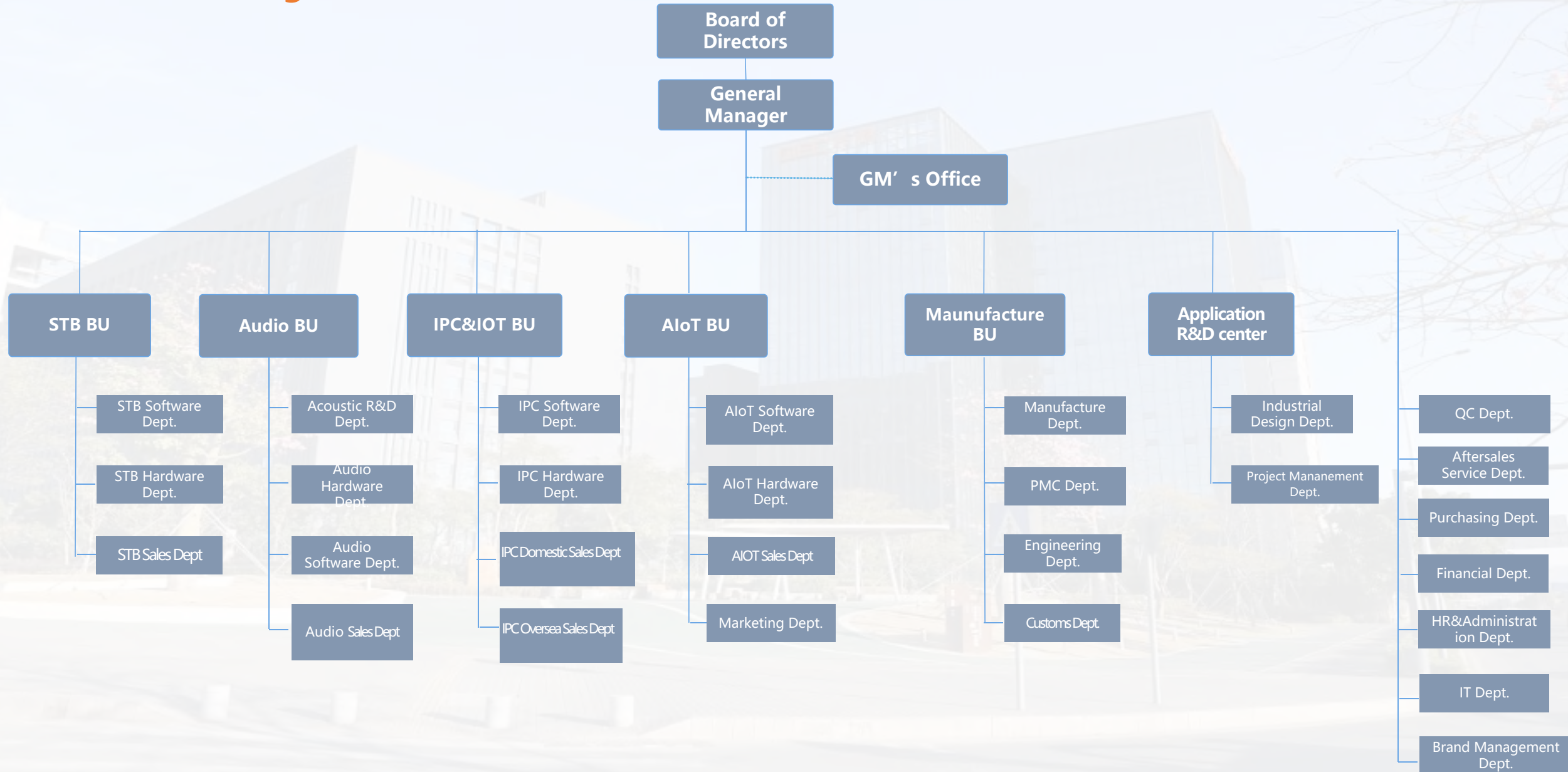


**2023**

Awarded the title of "Specialized, Refined, Unique, and New" Small and Medium sized Enterprise in 2023.



# Organization Structure





## R&D Strength



### Software ability

- ROTS/Android app development
- CAS/DRM Intergration
- DVB app development
- Android APK/Launcher development
- MCU development
- Manufacture automatic test app development
- Terminal management system development



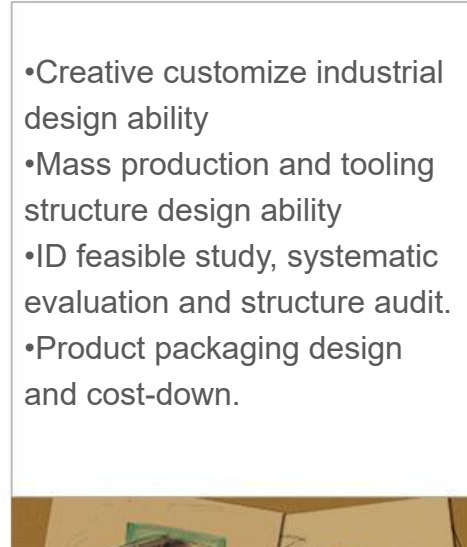
### Hardware ability

- Hardware core indexes test plan
- Hardware schematic and PCB layout development
- Quality control and test plan development
- Manufacturing facility customize and design
- Best price component design ability



### Accoustic R&D ability

- Sound&Accoustic concept design, stimulate and analyze
- Structural design of signal fluid system
- Sound tuning, gold ear measurement
- Product measure, performance validate



### Industrial design

- Creative customize industrial design ability
- Mass production and tooling structure design ability
- ID feasible study, systematic evaluation and structure audit.
- Product packaging design and cost-down.



### R&D Team

- Software engineer 80 people
- Hardware engineer 50 people
- ID engineer 10 people
- Structure engineer 20 people
- Graphic designer 10 people
- Accoustic engineer 8 people
- Application engineer 25 people

## Manufacture Strength



- S 8 SMT Fuji high-speed production lines
- S 14 million points capacity per day
- S Able to produce 01005 encapsulation accuracy
- D 6 Wave soldering machines|4 Automatic DIP lines|4 Automatic testing production lines
- D 6 Automatic variable speed DIP lines  
6 PCBA testing production lines
- A 4 assembly workshops(1 dust-free workshop)
- A 24 professional production lines
- A 2 million pcs/sets monthly



## Reliability Test



Optical test equipment



Environmental test equipment



Drop test equipment



Life test equipment



RF test equipment



Water-proof test equipment

## R&D Strength

### Listening Room



The Metrology Institute certificated listening room, built with "box in box" structure, contributes significantly to keeping background noise below 15 dB(A). It gives the most suitable reverberation time for listening by rigorous internal room design and the precise combination of the sound absorbers/diffusers. The neutral listening room helps the final sound tuning satisfying all the users under different listening environments.

### Anechoic Chamber



The Metrology Institute certificated full-space anechoic chamber equipped with sound absorbing wedge, has 7.2 x 5.8 x 3.7m net space for measurement. It gives more than 5 meters free field accuracy and only 17dB(A) background noise which is able to handle different measurement requirements of various audio products.

### Professional acoustic R&D facilities



GIEC has professional acoustic R&D facilities, such as Klippel audio analyzer, AudioPrecision brand X525 electroacoustic analyzer, AudioPrecision X525 B series electroacoustic analyzer etc, which can be used for full performance analysis test of transducer units, electroacoustic field test, acoustic test, and etc.

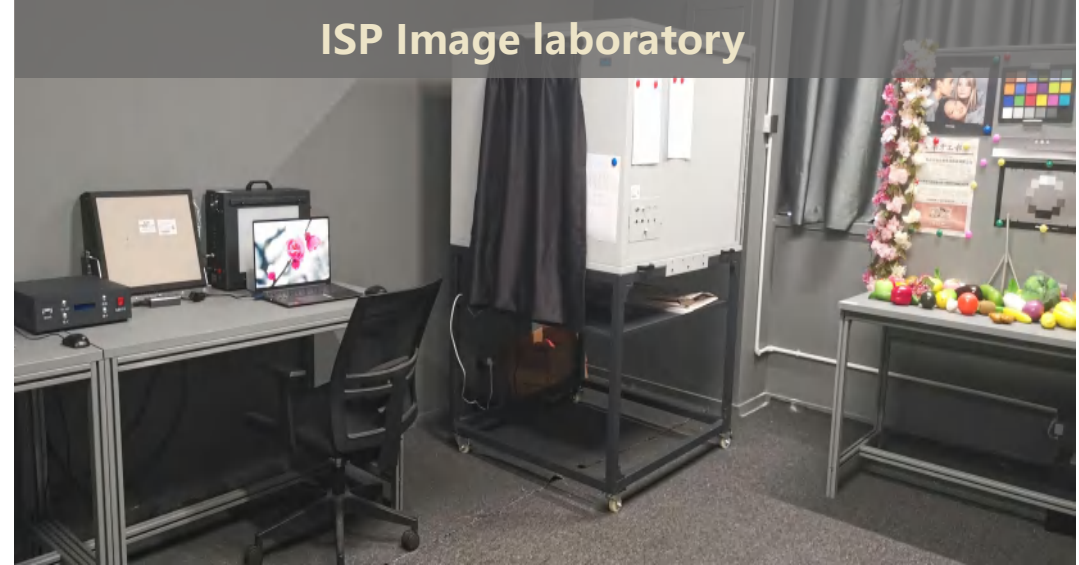


## Vison Production Test Room

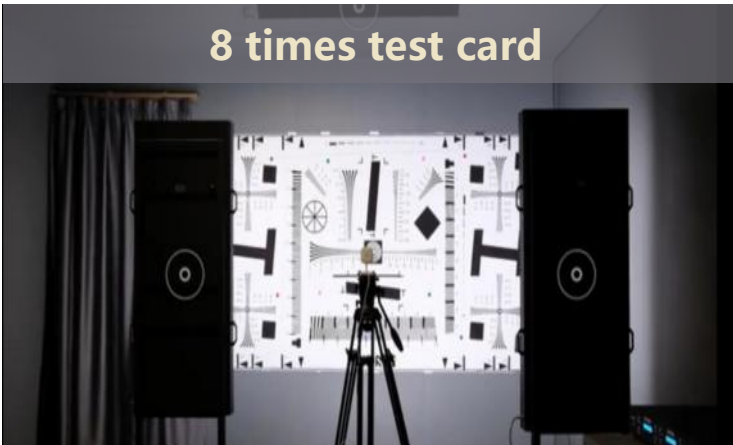
ISP Image laboratory



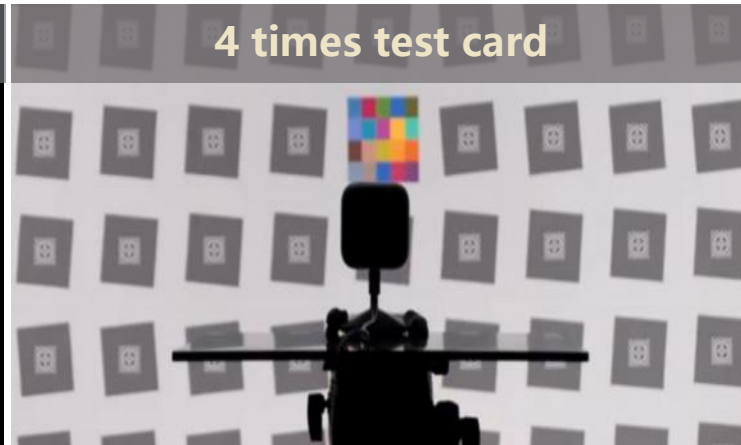
ISP Image laboratory



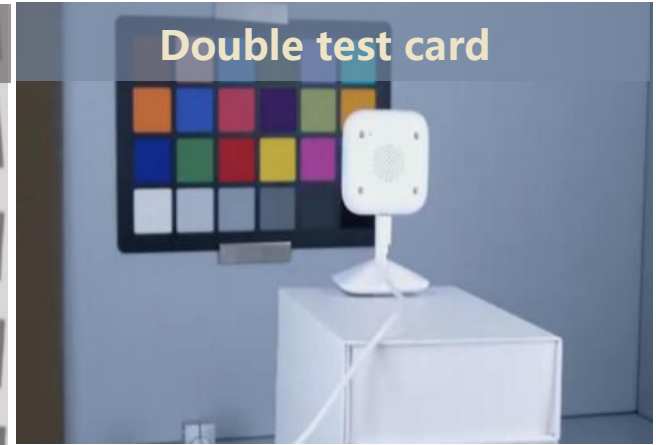
8 times test card



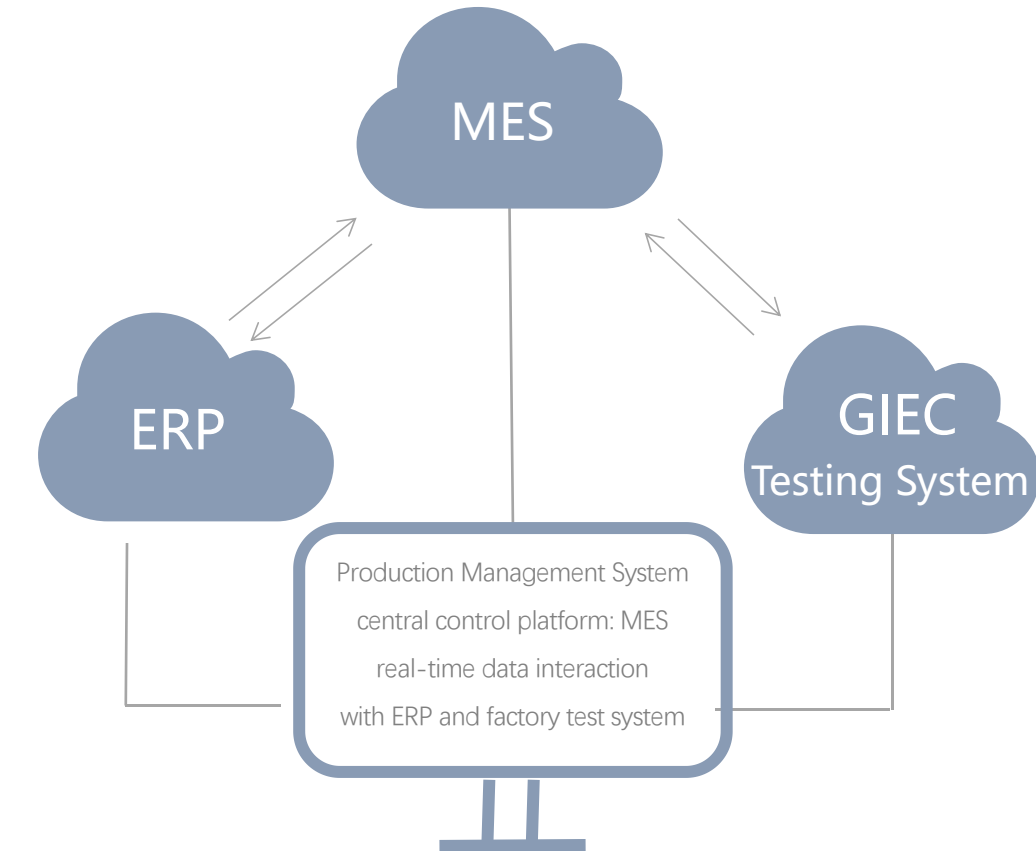
4 times test card



Double test card



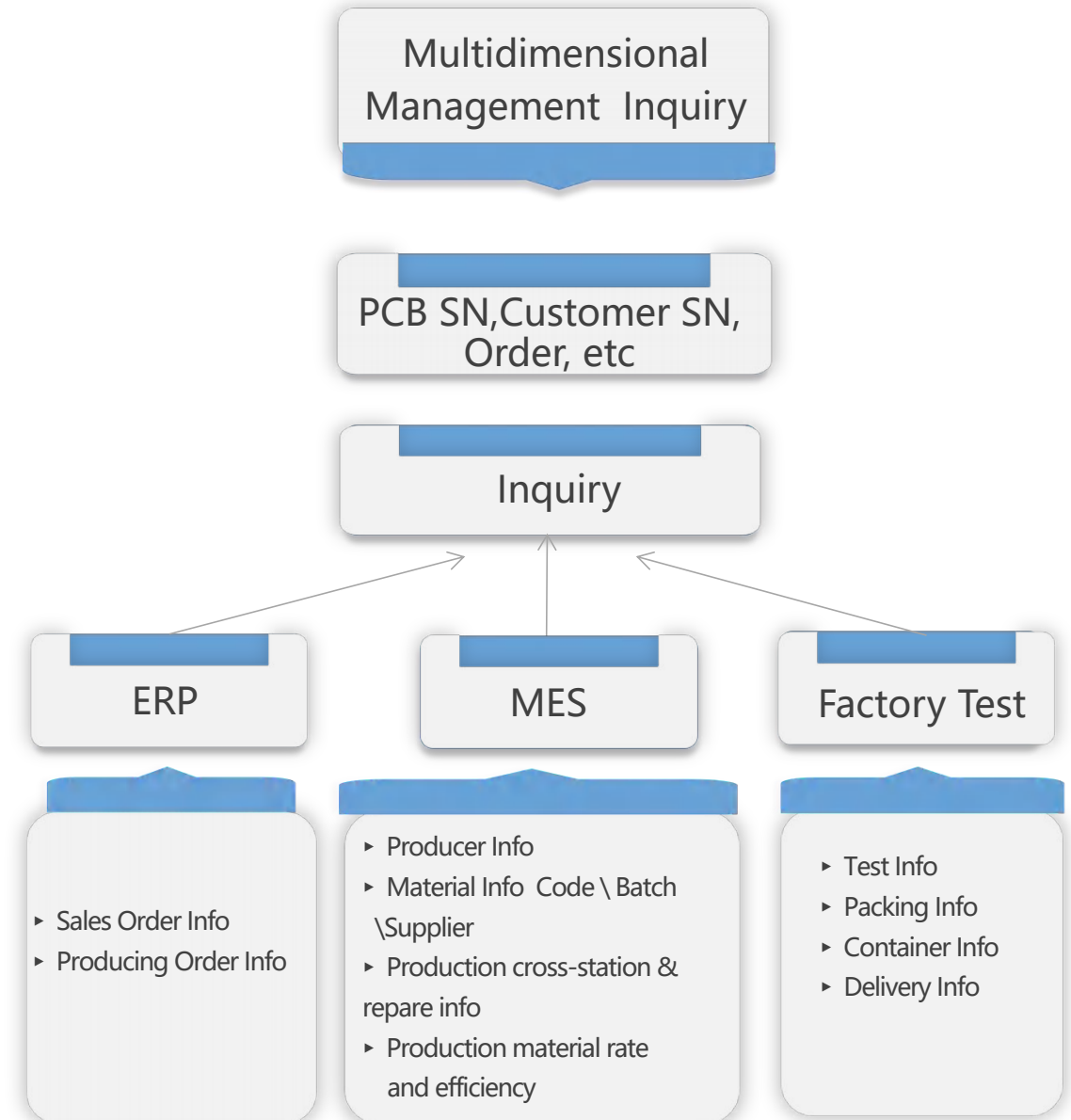
## Information System



ERP: management of the sales order & Material requirement control & Purchase order process

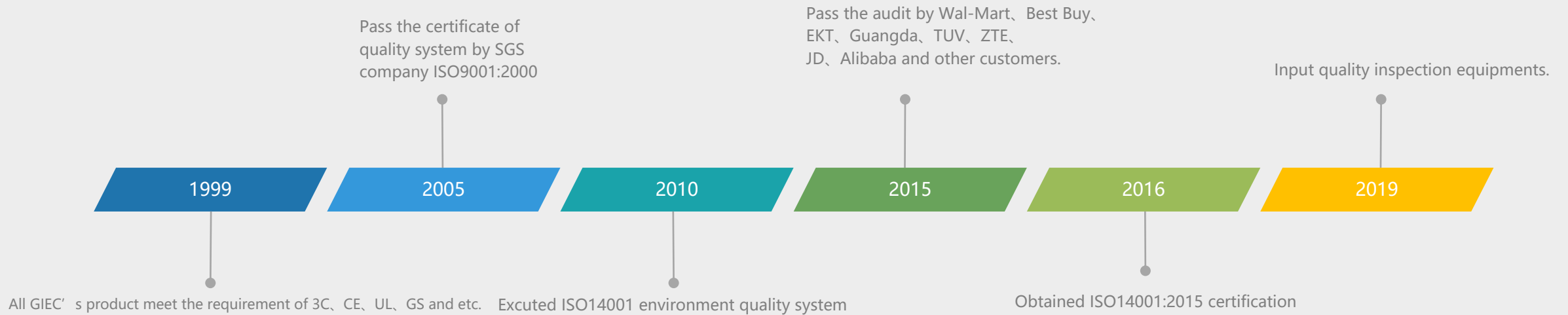
MES: Management of material receiving, storing and sending, SMT & DIP workshop production process

Testing System: Customized development of test process & packing specification by product category





## Quality Control and Certificate



### System Certificate



### Optional Certificate



GMS



CB

### Chemistry certificate



### Industry Certificate



### Region Certificate



CE

FC

IC



### Battery transportation certificate

MSDS

UN38.3



IEC 62133

## GIEC Product Line



**AIOT/Display  
Terminal/Edge Computing**



**DTV/OTT box**



**AV/AI Speaker**



**IPC/Camera**



## AIOT Production Line

Embedded board  
Industrial display solution  
Intelligent building control Panel  
Education equipment solution  
IoT single product

Relies on ARM, X86 and other architecture platforms, GIEC AIoT product covers embedded board, industrial display solution, smart building central control panel, educational equipment solution, and IoT single product, which can provide customers with efficient and professional OEM/ODM overall solution. With strong R&D capabilities, advanced management system, excellent product quality and perfect after-sales service, GIEC has established strategic partnerships with well-known companies in the industry such as Honeywell and Lenovo. In the future, GIEC AIoT will become the leading embedded technology platform and solution provider in this field.



# IoT Product Solutions



01

## Industrial Display Solution

With the development of industrial automation and control technology, It also brings higher challenges to the efficiency and accuracy of the manufacturing industry. GIEC Industrial Tablet has high stability and low power consumption, making it easy to move and disassemble, making work easier.



02

## Intelligent building central control Panel

As an important component of smart homes, GIEC Security Tablet solves two key issues of communication and control, and works in conjunction with other series of smart products such as gateways, sockets, LED lights, switch panels, etc. to complete the control of the entire living environment.



03

## New retail/ID card intelligent terminal

With the development of new retail and biometric security technology, intelligent terminals are widely used in daily life scenarios. GIEC launched a multifunctional intelligent device that integrates live facial recognition, fingerprint recognition, and second-generation certificate verification. It will be applied in industries such as public security, finance, healthcare, social security, hotels, and catering in the future.



04

## Educational Equipment Solution

As a multimedia interactive display terminal, GIEC Education Tablet effectively integrates and utilizes educational tools, subject software, and information resources.



## Understanding of Demands

1. With rich experiences in product customization, we can provide multi-modal product solutions.
2. Strong industry information synergy, upstream and downstream information resource integration and sharing.
3. Provide one-stop service.

## Accumulation in the Industry

1. Honest and responsible corporate style.
2. More than 20 years of brand accumulation in the industry.
3. Years of experience in serving domestic and international headline corporate clients

## Excellent Resources

1. Long-term and stable strategic co-operation with the original manufacturer.
2. bundant upstream and downstream resources.
3. Years of supplier reputation.
4. Completed manufacturing system.



## R&D Customization

1. Product development capabilities in multiple technical fields, industrial design, mechanical design, hardware development, software OS customization, APP development, cloud development, and etc.
2. Scientific and rigorous R&D control process to ensure the speed and quality of product development.
3. Reliable and completed design verification capability. Formulate product verification strategies according to business scenarios.

## Product Delivery

1. Standardized quality management process.
2. Lean manufacturing system.
3. Stable and long-term supply chain support.
4. Continuous promotion and iteration of the information system.

# AIOT Ability



According to customer needs, GIEC has the ability to provide completed product service, including ID design, mechanical design, hardware design, software development, SMT production, whole unit assembly and shipment, and after-sales service.

Relying on the support of original factory resources, GIEC has independent software and hardware development and design capability based on multiple platforms and solutions, including drivers, system development, application development, RF debugging, and etc.

**Rockchip:** RK3566/RK3568/RK3399/RK3562 /RK3576/ RK3588

**MediaTek :** MT8167/MT6762/MT6833(Dimensity700)/MT6765/MT6769/MT6789/MT6877(Dimensity900).

**NVIDIA :** NVIDIA XAVIE NX





## Industrial Display AIO

GIEC is committed to providing optimal solutions for industrial automation and specific industries, including leading software and hardware customization development, as well as providing core computing and control equipment for various industries based on advanced manufacturing systems. GIEC's industrial display terminals from 13.3 inch to 32 inch, provide rich interfaces and high computing power, with a maximum expenditure of 12 TOPS computing power. They also meet the needs of multiple communication interfaces, such as 4G and 5G communication. The product provides multiple installation methods, including embedded installation, wall mounted installation, and VESA bracket installation. The installation and maintenance are very convenient. The equipment adopts fanless design to reduce noise and ensure more stable operation. Rapid dissipation of internal system heat through surface heat sinks, enabling it to adapt to harsher field environments. It's most suitable for application in intelligent factories, intelligent manufacturing, CNC equipment, textile equipment, intelligent power, production line automation traceability and other upper computer monitoring and control.

# Industrial Display&Control Terminal

- Mutiple size options, **13.3" 15.6" , 21.5 " , 23.8" , 32"**
- Rich interfaces, support RJ45,PCIE,RS232,RS485,USB2.0,USB3.0,CAN, HDMI and etc.
- Wide temperature range: -20~65°C
- Output high computing power from 3TOPS to 12TOPS
- Support WiFi 6、 4G、 5G optional
- Maximun ROM+RAM: 8GB+128GB, also external disks
- VESA port optional, support various installation senarios
- Mutiple platforms optional, **RK3399/RK3568/RK3588**



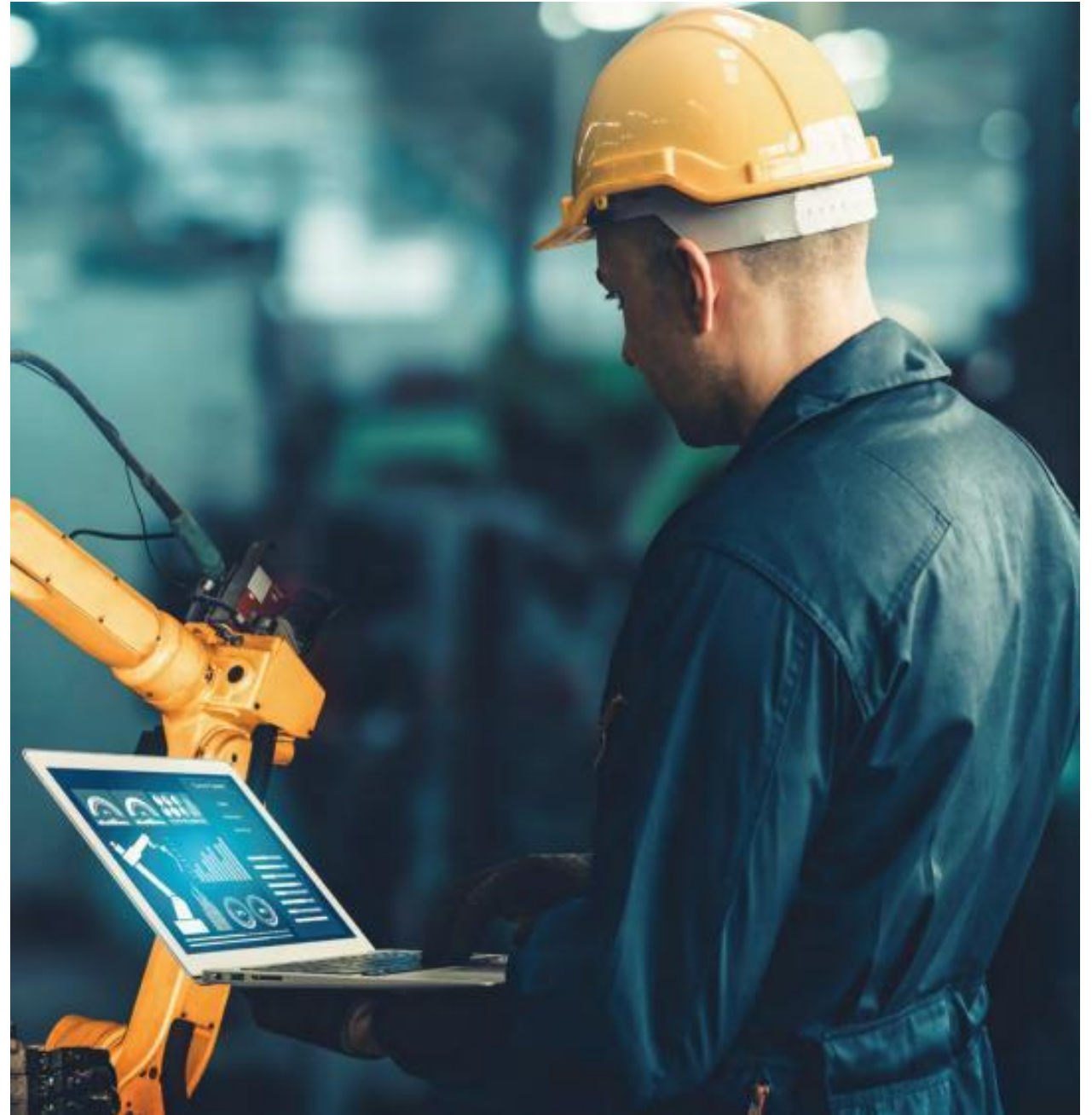
## Mother-board optional function

eDP Screen	FPC expanded port	1*40pin 0.5mm
I2S port	socket expanded port	PHB2*3 2.0mm
UART port	socket expanded port	PHB2*2 2.0mm(Max*5)
USB2.0	socket expanded port	PHB1*4 2.0mm(Max*3)
Power-Key port	socket expanded port (button with indicator)	PHB2*2 2.0mm
CAN port	socket expanded port	PHB2*2 2.0mm (Max*2)
I2C TP port	FPCexpanded port	1*14pin 0.5mm
MIPI/LVDS port	FPCexpanded port	1*40pin 0.5mm
SIM port	FPCexpanded port	1*10pin 0.5mm
RTC port	socket expanded port	PHB1*2 1.25mm
Fan port	socket expanded port	PHB1*4 2.0mm
Speaker port	socket expanded port	PHB1*2 2.0mm (dual-channel, Max 5W*2)
Camera port	FPCexpanded port	1*30pin 0.5mm
Screen backlight control port	socket expanded port	PHB2*3 2.0mm
Vagan port	socket expanded port	PHB2*2 2.0mm
12V output port	socket expanded port	PHB2*2 2.0mm
Power supply input port	socket expanded port	PHB1*4 2.0mm



# Rugged Tablet PC

GIEC is committed to providing the industrial control field and enterprises with optimal competitive industry solutions, including leading hardware custom development, underlying software packages and support, and core computing and control equipment for new and advanced manufacturing based on advanced manufacturing systems. In the future, GIEC will design and apply 5G, edge computing, wide temperature storage and other technologies in industrial products to effectively improve the real-time of industrial equipment, reduce latency, ensure the safety and reliability of industrial big data, and help intelligent manufacturing in the industrial field.



# Rugged Tablet PC

## Functions



- 10.1inch, 800\*1280 IPS/1200\*1920 IPS
- 8000mAH high capacity e battery
- Used at low temperature environment: -20°C
- 500W front camera, 1300W rear camera
- Various accessories options: charging home base, hand strap, shoulder strap and etc.
- Rugged design, IP65 (waterproof and dustproof) and 70cm drop resistance.
- Support system control customization and APP and data traffic control.
- Support Wi-Fi only or 4G LTE.
- Support maximum memory: 8GB+128GB
- OS: Android14
- Multiple solutions:MT6765/MT6769/RK3566





# Rugged Tablet PC

**GK-IS102M/R**

## Functions

- 10.1 inch high brightness screen, brightness up to 700nits
- Octa-Core 6nm advanced and high-end processor provides powerful computing power.
- Support maximum memory: 8GB
- 1300W ultra-high-pixel rear camera
- Used at low temperature environment: -20°C
- Rugged design, IP67 (waterproof and dustproof) and 150cm drop resistance.
- Bar/QR code decoding module, NFC and etc. modules options.
- Support Wi-Fi only or 4G LTE, 5G options.
- 8000mAH high capacity removable battery
- Support PD30W fast charging
- Android 13 OS, support multi-language
- Various accessories options: charging home base, hand strap and etc.
- Multiple solutions: MT6789/MT6877/RK3588

# Medical Tablet PC

## Functions

- Size: 8 inch and 10.1 inch
- IoT platform interconnection
- Used at low temperature environment: -20°C
- AI voice interaction
- Rugged design, IP65 (waterproof and dustproof) and 70cm drop resistance
- Bar/QR code decoding module, fingerprint identification module, ID card module, etc. modules options.
- Support system control customization and industry APP adaptation.
- Support Wi-Fi only or 4G LTE.
- Support maximum memory: 8GB + 128GB
- Using corrosion-resistant medical materials meets medical scenarios needs.
- Multiple solutions: MT8167/MT6765/MT6769/RK3566





# Smart Home Control Panel

GIEC Smart home control centre, provides smart and convenient control solution for all kinds of IOT devices of smart home and building. With multiple communication solutions integration. Maximally support various intelligent devices, various sizes from 4 inch to 10.1 inch and a variety of installation forms, such as detachable type or fixed type and etc. Providing high efficiency and low cost solution for smart home eco-system.

Functions Including:

- Voice interaction
- Wide working temperature range: -10°C to 45°C
- Strong reliability and stability
- Support WiFi, Zigbee, Zwave, Bluetooth and etc. protocol.
- Multiple size options: 4" ,7" ,8" ,10.1" and etc.
- Support multiple scene installations.



# Smart Home Control Panel

	GK-MJR4002	GK-MJY7012	GK-MJY8004	GK-MJY1020
CPU	MT8167S	MT8167/RK3566	MT8167/RK3566	MT8167/RK3566
SIZE	4'	7'	8'	10.1'
Display	720*720 IPS	1024*600 IPS	1280*800 IPS	1280*800 IPS
DDR			2G/4G	
FLASH			16G/32G	
WIFI		2.4G+5G:802.11a/b/g/n		
OSSYSTEM		Android/Linux		

## System Hardware Configuration

Type	Detail	Description
CPU	Type	MTK Quad-Core, Cortex-A35, MT8167A-S
	Speed	Up to 1.3GHz
GPU	Type	IMG GE8300, 500MHz
RAM	Type	PCDDR4*2
	Size	Max 2GB
ROM	Type	EMMC
	Size	16GB
Speaker	Built-in	Built-in
		8Ω/2W speaker x 1
MIC	Built-in	DMIC*2(Support far-filed awakening)
Sensor	L-sensor	Support

## Network

Type	Detail	Description
WIFI	WIFI Module	WIFI6 (2.4G): 802.11 b/g/n
BT	BT Module	BT4.2
Communication Module	Zigbee (optional, gateway function)	Zigbee 802.15.4
	Z-Wave (optional, gateway function)	Z-Wave 800

## Button

Type	Detail	Description
Reset	Hole	Support

## Interface

Type	Detail	Description
Mains Supply Port	Zero-fire line	N/L
Light control Port	Zero-fire line control	Supports 2 channel control

## Software Configuration

Type	Detail	Description
OS	OS Version	Android 8.1
	Language	Multi-language



# Educational Tablet PC

The 1031 series of educational tablets developed by GIEC for primary and middle school students for domestic and overseas, which integrates Voice Interaction, Industrial Protection, Eye Protection against Blue Light, Intelligent Distance Reminder, Handwriting and Detachable Keyboard, make it enabling the education industry, and serve thousands of teachers and students better.

Multiple platforms: Wi-Fi only or 4G LTE network optional

Eye protection and distance notification

Waterproof, drop resistance and dust-proof makes it durable

Capacitive pen/electromagnetic pen options to meet more different needs.

Detachable keyboard, convenient to use.

Increase local authority control to make parents more comfortable.



	GK-MJY1031	GK-MJS1031B	GK-IS1031R	GK-IS082M	GK-IS101M
CPU	MT8167 Quad-Cores	MT6765 Octa-Cores	RK3566 Quad-cores	MT6769 Octa-cores	MT6877 Octa-cores
SCREEN SIZE	10"1 IPS 1280*800	10"1 IPS 1920*1200	10"1 IPS 1280*800	8" IPS 1920*1200	10"1 IPS 1920*1200
DDR	2G/4G	4G/6G	2G/4G	4G/8G	4G/8G
FLASH	16GB max128GB	16GB max256GB	16GB max256GB	64G/128G	64G/128G
COMMUNICA- TION	WIFI ONLY	4G LTE	WIFI ONLY	5G NR	4G LTE
CAMERA	5.0 MP + 5.0MP	5.0MP + 13.0MP	5.0MP + 5.0MP	8.0MP +48.0MP	5.0MP + 5.0MP
BATTERY	3.7V 8000mAh				
NETWORK	2.4GHz+5.0GHz 802.11 /a/b/g/n/ac				
SYSTEM	Android 9	Android 13	Android 13	Android 12	Android 12



# Educational 2 IN 1 Tablet PC

GK-PT1160



- 11.6 inch 1200\*1920 IPS LCD
- Full metal body with detachable keyboard
- Equipped with intel high-end CPU, the overall performance of the system is more stable.
- Support electromagnetic pen technology for smoother writing and more realistic images.
- 8000mAH high capacity battery
- Time of endurance is 8 hours
- Support ARM platform and RK3568 solution

# Educational Tablet PC

System Hardware Configuration		
Type	Detail	Description
CPU	Type	Quad-core ARM Cortex-A55 RK3566
	Speed	Up to 1.8GHz
GPU	Type	Mali-G52 1-Core-2EE Max 800MHz
NPU	Computing Power	1 TOPS
RAM	Type	LPDDR4*1
	Size	2GB/Max 8GB
ROM	Type	EMMC
	Size	16GB/Max 128GB
Camera	Front	5.0MP FF
	Rear	N/A
	Flashlight	N/A
Speaker	Built-in	Built-in 4Ω/3W Speaker x 1
Buzzer	Built-in	12V (Passive)
MIC	Built-in	MIC*1
Indicator	Built-in	RGB
Sensor	G-sensor	Support
	L-sensor	Support
WIFI	WIFI Module	2.4G: 802.11 ac/a/b/g/n
BT	BT Module	BT5.0
Zigbee(RF1)	Zigbee Module	RF module size: 29x32mm, Height: 3.2mm
Zwave	Zwave Module	Z-Wave 800 Series
LAN	LAN	RJ45 Megabit
TF Card	Expanded External Storage	Micro SD/Max 128GB
Type-C	Charging+Data transmission	USB2.0 OTG
SIM	Built-in	Micro SIM (flip-top)
IO Port	IO	IO-IN*2 + IO-OUT*1
Adapter	Optional	5V/3A Type-C
USB Cable	Optional	A-to-C USB cable
OS	OS version	Android 12
	Language	Multi-language

GK-MJY7012



## Commercial/Industrial handheld PDA

Enterprise-grade handheld data terminal, applicable to mobile payment, logistics, warehouse management, medical field of the new generation of Android products, both comfortable operation ease of use, but also has a powerful combination of functions, to meet the use of the environment on the stability and durability of the requirements of the work environment to maximize the efficiency of the work efficiency and more efficiently serve the customer.

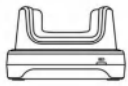




# Commercial/Industrial PDA

## S650/S651

- Powerful CPU MT6833  
(Dimensity 700) /MT6769
- High resolution 1600\*720、IPS 6.517 inch screen



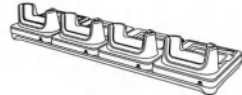
1 Charging Cradle



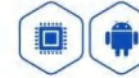
2 Scan Handle



3 Quad Bay Battery Charger



4 Quad Bay Charging Base



### Powerful 8-core processor Android 14 system smooth experience

8 core 2.2GHz CPU, running faster, more smooth multitasking, so that the product has a longer life cycle.



### Professional 2D scan engine Scanning more efficient

Support 1D/2D barcode recognition, high recognition rate, support Honeywell, zebra and other scan engines.



### System security assurance

Professional source code scanning analysis (Black Duck and Sonarqube), providing full range of risk management and vulnerability repair, and continuous maintenance updates.



### 5G+WIFI 5 / 4G+ WIFI 5

WiFi 5, Ultra-low delay, ultra-low packet loss rate, ultra-strong signal. Keep your device online at all times, ensuring timely data upload and SIP uninterrupted calls.



### Strong and durable protection is easy to cope with harsh environment

Through IP67, 1.5m drop, explosion-proof and other authoritative certification, can ensure that in a variety of harsh use environment play its excellent performance.



### 5000 mAh large capacity battery Supports hot swap without interruption

Built-in intelligent power management chip, avoid overcharge and overdischarge, extend battery life. Hot swap the battery without exiting the application.

## Commercial/Industrial PDA

### S550

Mobile handheld data terminal, powerful octa-core performance, rugged and lightweight.

#### Functions:

- CPU: MT6762 Octa-Core
  - Superior protection level: IP67, 1.2m drop resistance
  - 1300W high resolution camera
  - 5000mAh high-capacity battery
  - Support WiFi5 and 4G
  - Wide temperature storage: -20°C to 60°C
  - Support GPS+Glonass+Beidou+Galileo(+AGPS)
  - 30% faster decoding speed with high-speed scanning engine.
  - Enterprise-grade Android 13 CPU, highly effective response to multi-tasking, stable and smooth network to ensure efficient data transmission.
- Abundant handheld accessories
- Multiple size: 5.45" ,3.97"



## Commercial POS Display Terminal

- Multiple solutions: RTD2556,RK3568, RK3399,RK3588, etc
- High-computing power: 3TOPS, 6TOPS, 12TOPS, 21TOPS
- Abundant interfaces: HDMI, RJ45, USB2.0, USB3.0, RJ12, etc
- Support dual-screen high-definition heterodyne display
- Support multiple communication protocol: WiFi5, 4G, 5G, etc.
- Support face recognition, ID card recognition, QR code recognition, fingerprint recognition, etc.
- Supports active capacitive stylus pen and electromagnetic stylus pens, etc.

	G156	G156PRO
CPU	RTD2556/MCU	RK3568 Quad-Core
3D Structure camera	N/A	N/A
PEN	EMR Capacitive pen	
Vesa	75*75mm	
NFC	YES	YES
QR scanning	YES	YES
Fingerprint	YES	YES
Port	USB2.0/USB3.0/DC/TYPE-C/RJ45/HDMI and etc.	





## Edge Computing Terminal



It meets the high computing power demand of IoT devices and sensors in edge computing, provides real-time data analysis, local storage, data encryption and privacy protection, etc., and achieves high-precision face recognition, vehicle recognition, personnel attributes, human body, non-motorised vehicles, and other structured recognition functions in different scenarios. It is applied in commercial retail, campus, community, superstore, medical care, travelling, tourism, etc., enriching the AI edge algorithm warehouse and matching more demand scenarios.

**Intelligent Manufacturing:** In the field of intelligent manufacturing, edge computing is mainly used in industrial internet to realise equipment connection, data collection, real-time monitoring and other functions to improve production efficiency, reduce energy consumption, ensure production safety and so on.

**Intelligent Transportation:** Through edge computing technology, real-time data collection, processing and analysis of roads, vehicles and other transportation facilities can be achieved to improve the efficiency of traffic operation, reduce congestion and the risk of accidents.

**Smart City:** Various services and facilities in a smart city, such as smart lighting, smart security, smart energy, etc., can utilise edge computing technology to achieve rapid data processing and response, and improve city management and service levels.

**Smart Retail:** In the field of smart retail, edge computing can be used to implement smart shops, smart inventory management, smart pricing and other functions to improve sales efficiency, optimise inventory management and customer shopping experience.

## Edge Computing Terminal



- Multiple forms: Fanless design, metal case (Vertical/Horizontal)
- Multiple solutions: RK3568, RK3588, NVIDIA XAVIER NX, etc.
- Support 1~2 AI acceleration module expansion, Max computing power expansion: 24TOPS
- Abundant interfaces and Superior interface Expandability: RS232, RS485, Gigabit RJ45, POE, CAN, HDMI, PCIE, USB2.0, USB3.0, etc
- Support dual-screen high-definition heterodyne display
- Support multiple communication protocol: WiFi5, 4G, 5G, etc.
- Support multiple certifications: CE, FCC, 3C, etc
- Multiple application forms: Edge Enhanced device, Edge Gateway, Edge All-in-One, Autonomous Settlement Device, etc.



## GK-IB161R

- Multiple solutions: RK3588/RK3588S
- 8nm tech design, Octa-Core CPU
- Support power button, SIM, SSD(SATA)
- High-computing power: 6TOPS, Max12TOPS. Support 8K display and multiple camera input
- Abundant interfaces and Superior interface Expandability: RS232, RS485, Gigabit RJ45, POE, CAN, HDMI, PCIE, USB2.0, USB3.0, etc (Max support 4\*DB9)
- Strong visual processing power, support structured light, TOF and other fast face recognition solutions.



# Edge Computing Terminal

## GK-IB222R\IB221R

- Multiple forms: Fanless design, metal case
- Multiple solutions: RK3568 ,RK3588,etc
- High-computing power: 3TOPS, 6TOPS, 9TOPS, 12TOPS, Max 24TOPS
- Abundant interface and Superior interface Expandability: RS232, RS485, Gigabit RJ45Abundant interface, POE, CAN, HDMI, PCIE, USB2.0, USB3.0, M.2 SSD,etc
- Support dual-screen high-definition heterodyne display
- Multiple application forms: Edge Enhanced device, Edge Gateway, Edge All-in-One, Autonomous Settlement Device, etc.



## Core Motherboard Module



- Multiple core motherboard solutions: RK3399/3399K/3566/3568/3588,etc
- Compact size and high performance
- Abundant interface and flexible customization expansion
- Support dual-screen high-definition heterodyne display
- Modular design, flexible customization, fast delivery
- Meets a wide range of certification requirements
- Multiple application forms: Edge Enhanced device, Edge Gateway, Edge All-in-One, Autonomous Settlement Device, Robot, etc.

# Our Partners





# THANKS

Science and Technology Innovation / Win-Win Cooperation

Tel: 0755-83478808   Email: [baj@giec.cn](mailto:baj@giec.cn)   [www.giec.cn](http://www.giec.cn)