



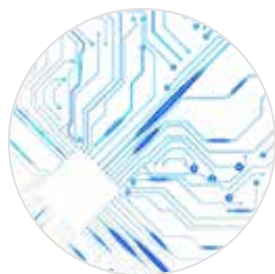
Being the Global Leading IPC&HMI System Platform Manufacturer



ABOUT US



PRODUCTS



R&D



QUALITY



DELIVERY



SERVICE



[ABOUT US](#)



PRODUCTS



R&D



QUALITY



DELIVERY



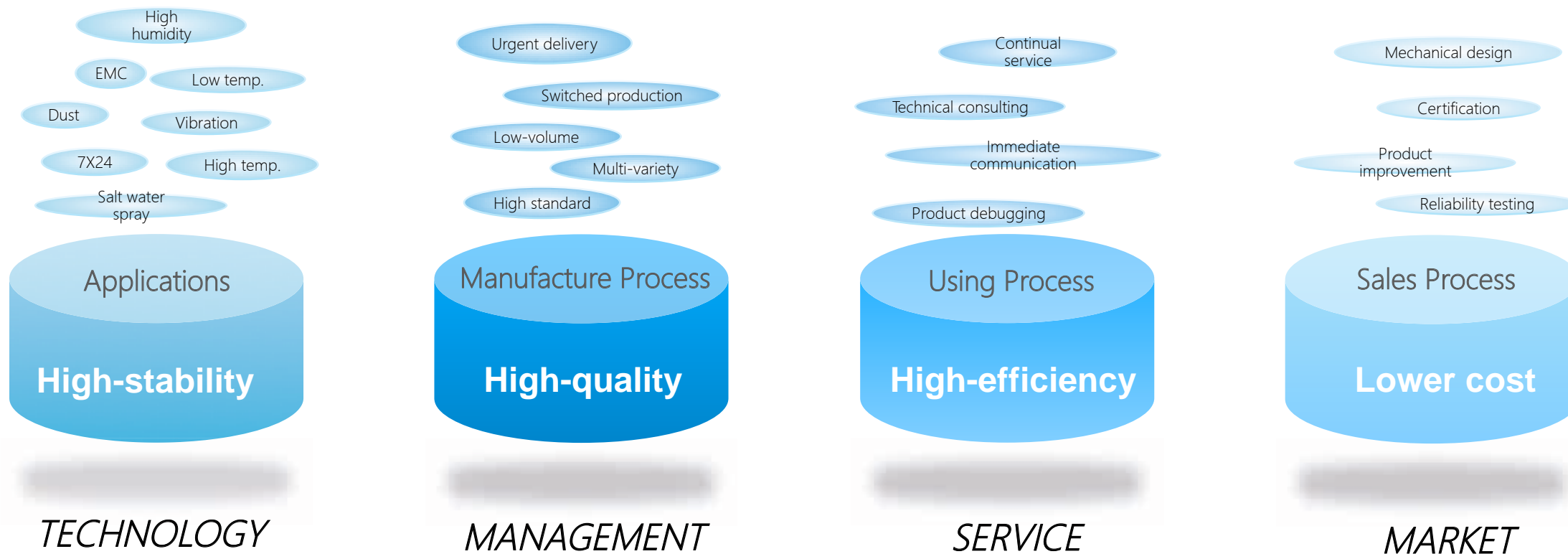
SERVICE

# // Company Overview

## About NODKA

-  Established in 2001, Shanghai China
-  Headquarter: Suzhou City, Jiangsu Province, China
-  Employees: 326 HC, 25% R&D Staff
-  Sales Volume: 346 million RMB (in 2022)





## Enterprise Mission

Be dedicated to face four core challenges in industrial computer field and improve NODKA's international market position and influence in IPC industry.





# Core Team and Operation Principle



Frank Gao

CEO

28 Years'

working experience in  
automation industry



Michael Wang

General Manager

25 Years'

working experience in  
automation industry



Ryan Zeng

Product Director

23 Years'

working experience in  
automation industry



Core values KIND、BRAVE、OPTIMISTIC

Corporate Culture Entrepreneurial spirit、Value-created、Self-transcendence、Responsibility-taking



# Growing Milestone







Take root in China's intelligent manufacturing center and build intelligent manufacturing factories

## Global Sales System Layout

- Established European Service Center in Eindhoven, the Netherlands.
- Keep long-term partnership with prestigious companies in 19 countries.

Stable construction of global supply and local service capacity

📍 分支机构 branch office

📍 代理商 partner



## 3 R&D Centers

Suzhou : Embedded and system(X86)

Shenzhen : Software and hardware(ARM)

Kunshan : X86 motherboard

## 2 Manufacturing Centers

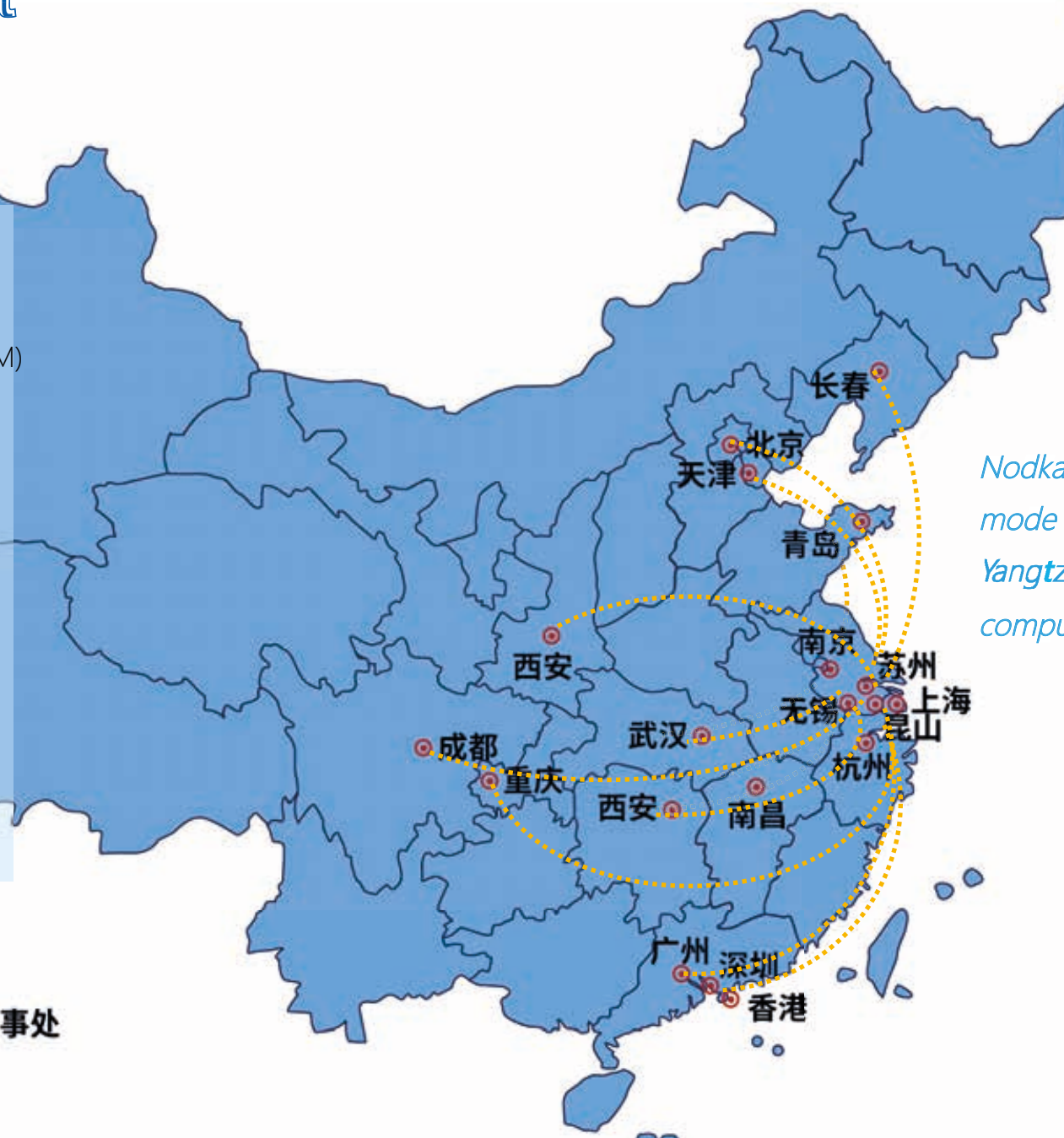
Suzhou : CNC machine、Precious sheet metal、 SMT PCBA manufacture、 Assemble System

Guangde : 450,000 m<sup>2</sup>. It will come into use in 2023.

## 17 Branch offices

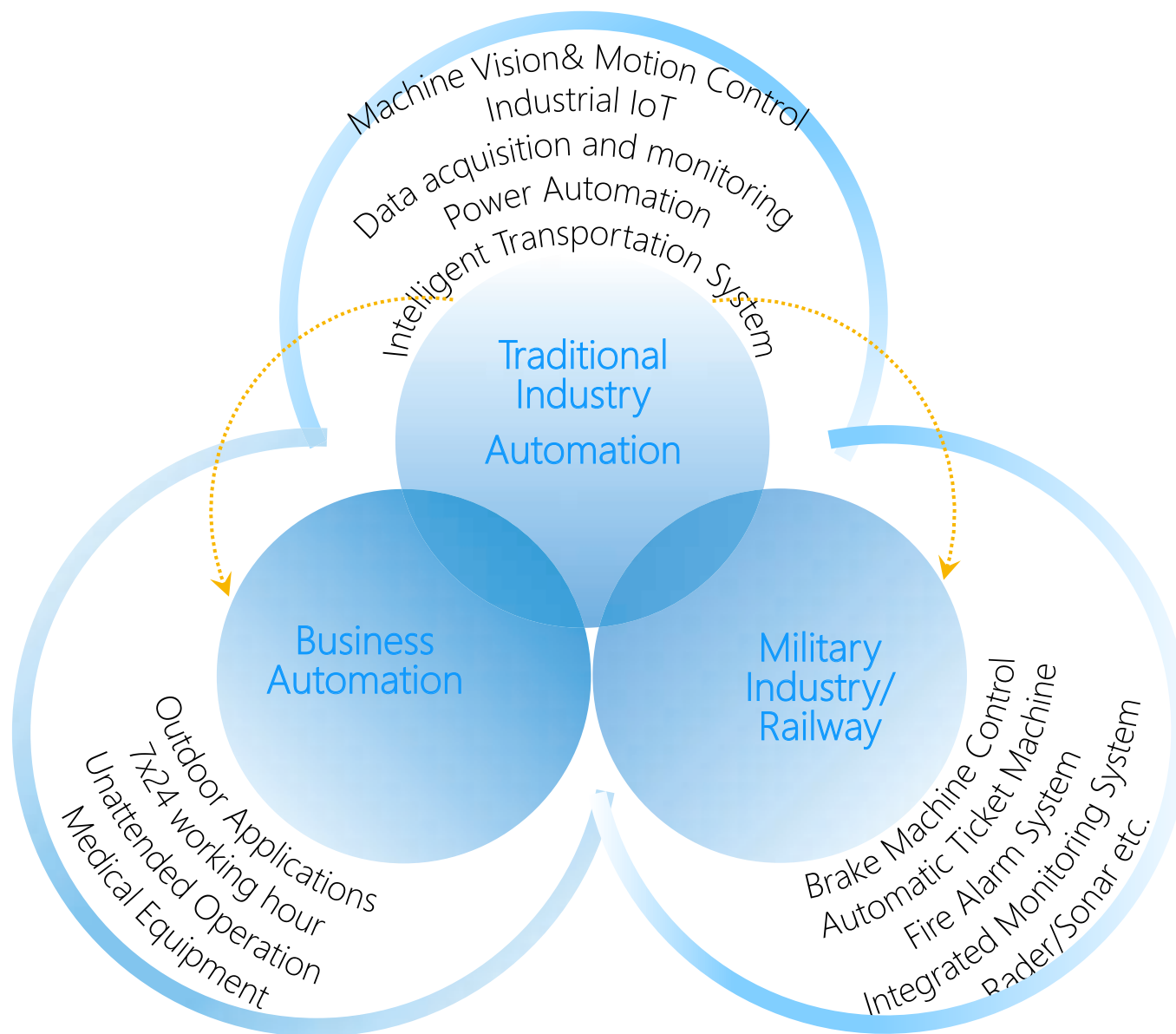
● 分公司&办事处

*Nodka develops in a Suzhou-centric mode by gathering superior resources of Yangtze River delta in industrial computer industry.*





# Industry Orientation



Machine Vision



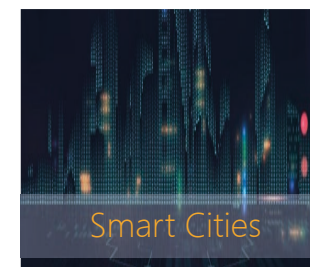
Industrial IoT



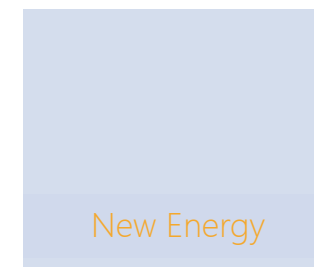
Intelligent Manufacturing



WIT 120



Smart Cities



New Energy



Rail Transport



Military Industry



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Embedded Industrial Computer



Embedded IPC for Automation  
Controller



Swing ARM Panel PC /  
Monitor



Industrial Panel PC / Monitor



Embedded Motherboard / CPU Module



Localization network security  
hardware





Fanless Box PC

## Ingenious Design

- X86/ARM Platform option
- Various mounting option
- Industrial grade IO
- Wide temp. & Wide voltage
- High Reliability
- Windows, Linux OS



Rack-mounted IPC

## The Classic Re-Creation

- 4U Industrial PC
- Fanless 4U IPC
- Rack mounted
- Various M/B option
- Multi-expansion slot
- Various CPU platform



High performance IPC

## Sustainable Innovation

- High performance mobile CPU
- Fanless design
- PCI/PCIe slot
- High Reliability
- Long life cycle
- Support customization

## Automation PC

Compact and Space saving design  
Celeron and Core-I CPU option  
COMLAC modular design  
Offer maximum scalability  
Support RTOS system



## Agile IO modules

Support EtherCAT  
Modularity & Flexibility  
Compact & Error prevention  
Cost-efficient



## Embedded IPC for Automation Controller



## E-Link Remote Transmission Device

100 meters transmission between PC and display



## UPS - Uninterruptible Power Supply

DC12-24V wide voltage input  
Configurable power management mode  
Environment friendly super capacitor  
-20°C~60°C operation temperature



NP Series Basic PC + Various I/O module



# Swing ARM Panel PC / Monitor



## ICP69 Series Swing ARM Panel PC

Based on Intel Celeron, Core-i CPU



## IDP59 Series Swing ARM Monitor

Support VGA and DVI-D , option build-in elink remote transmission module, up to 50 meters.



*Option size: 15", 18.5", 19", 21.5"*  
*Option handle and Keyboard stand*  
*Option RAFI and IDEC buttons*





## Industrial Grade Panel PC

TPC6000-A/B/C/D Series/ WP IP69K Series

Option size: 8"/10.4"/12.1"/15"/15.6"/17"/18.5"/19"/21.5"



## Industrial Monitor

PANEL5000-A/B/C/D Series/ WP IP69K Series

Option size: 8"/10.4"/12.1"/15"/15.6"/17"/18.5"/19"/21.5"



Customized Service



Particular Color and Print Logo



Front panel IP65



Various mounting method



DC12/24V Voltage input



Option Resistive/Capacitive touch



COMLAC design



-20 °C ~ 60 °C working Temp.

WP1x01T Panel PC



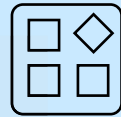
## Stainless Steel housing

- Perfect cooling system
- Full-sealed design



## Fanless Design

- Option J6412/J1900 processor
- -20°C~60°C working temperature



## Modular Design

- Courier board + CPU module structure
- Standard M12 connector



## IP69K protection

- Can be cleaned with 80 degree water
- Water pressure up to 80-100 bar



## Option resistive and capacitive touch

- Option 15, 19 and 21.5-inch

WP1x01P Monitor



CPU modules



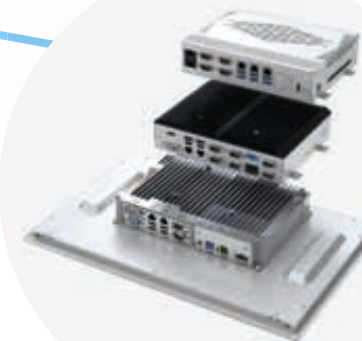
Carrier Board



System Box



Modular all in one system



## Life cycle control and iterate quickly

- Flexible combination between CPU modules and Carrier board
- Option Intel Celeron and Core-i
- Upgrade easily



## PCBA board size flexible

- Standard size : ATX/Mini-ITX/3.5"
- Following customers' demand



## Optimized cost-efficient

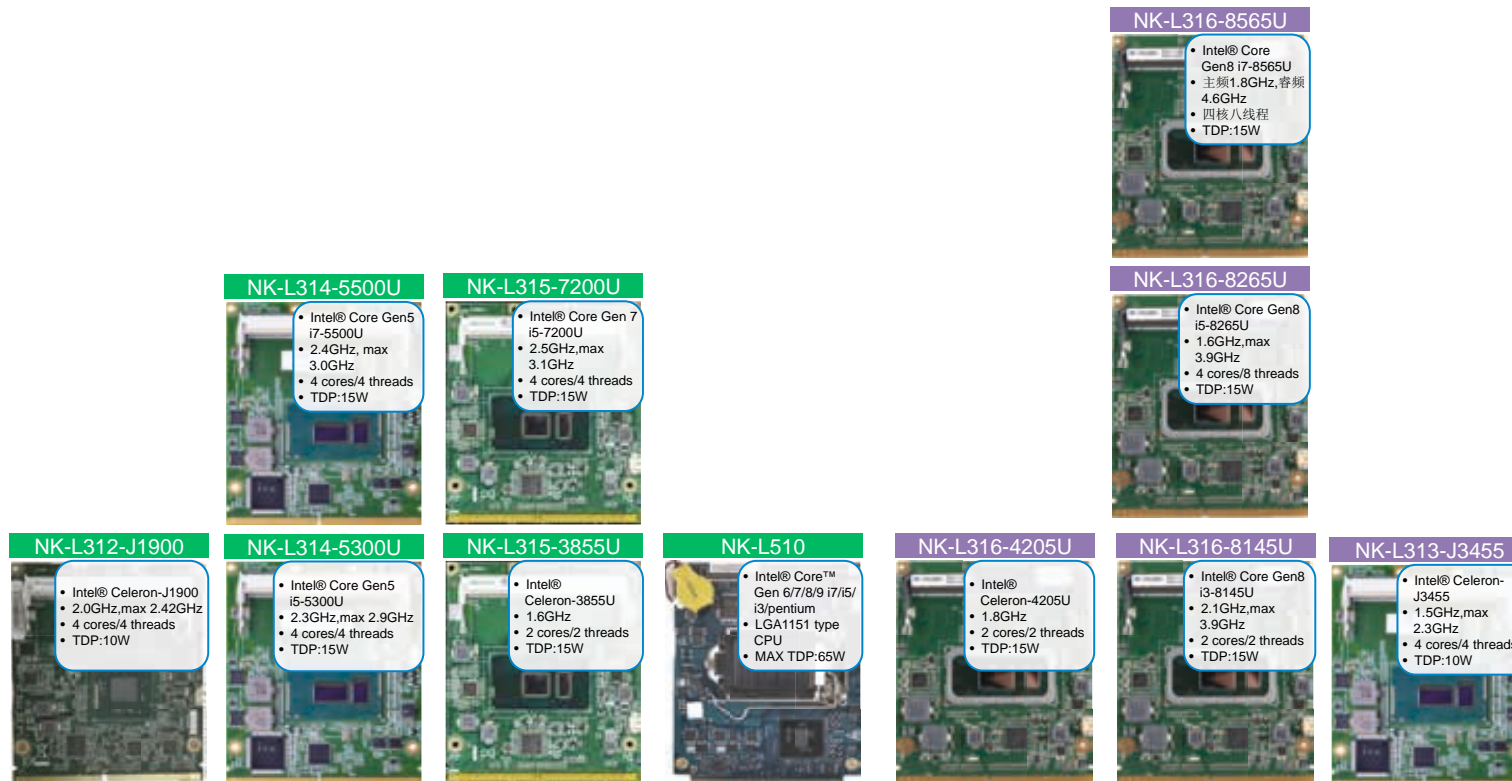
- Conductive to cost control
- Offer cost-efficient products for customer



## Improve R&D capability

- Keep improving integration and reliability

# COMLAC CPU module & Carrier board



## Customized COMLAC Carrier board



CB01-complete function board



CB03-Box&Panel PC board



CB06-PAC special board



CB07-Industrial operation Panel board



CB04-Free expansion board



CB09-Mold monitoring special board



CB05-Terminal special board

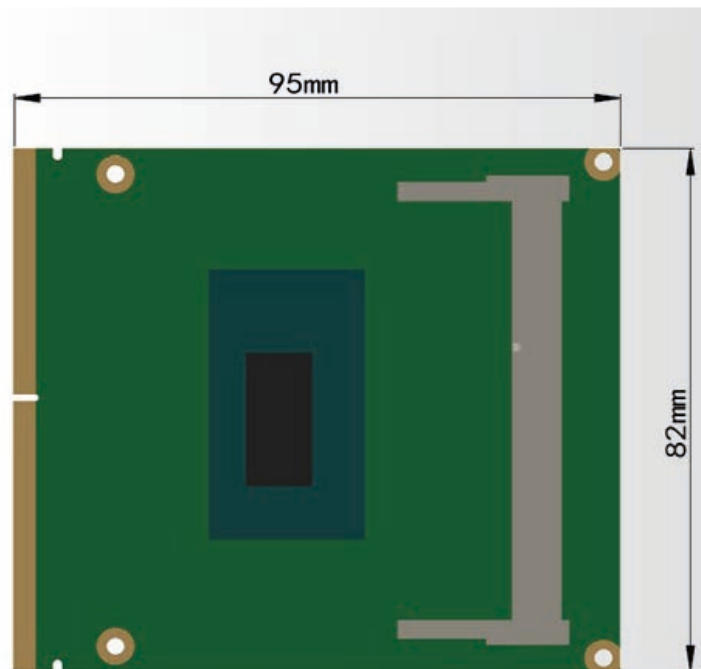


CB10-Digital signage special board



## MXM Connector

- One Gigabit Ethernet Port
- LPC Interface
- Two Serial ATA Port
- High definition Audio
- Four USB3.0 Ports
- Eight USB2.0 Ports
- Four PCI express lanes x1
- One PCI express lanes x4
- One eDP interface
- Two DDI interface
- Four GPIO Pins
- Keyboard & Mouse
- +5V Primary Power Input
- External SM bus
- External I2C bus
- Power Control
- Front Panel Signal
- Smart FAN Control
- SDIO Interface
- Six Serial Port



COMLAC  
Modular PC  
Win CAIMRS

"Innovative Product Award"

Developed by NODKA and followed X86 modular bus standard

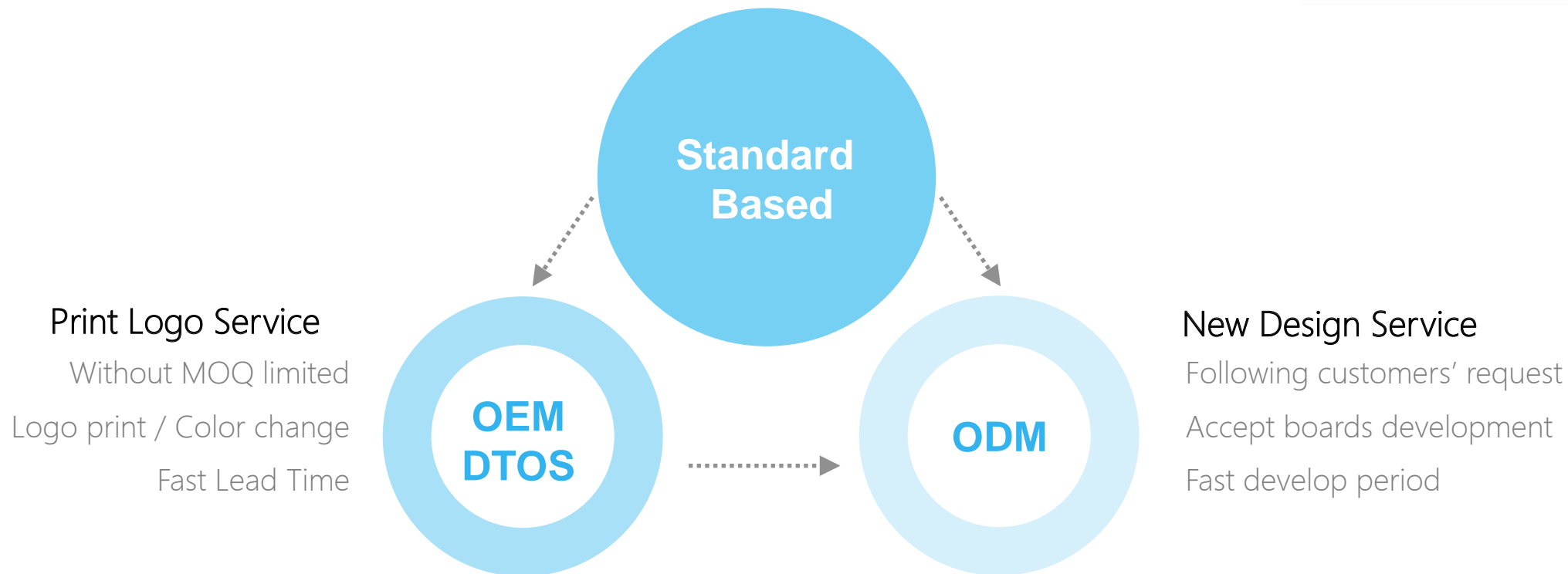
MXM3.0 high speed connector

Multi-TYPE CPU modules, P2P compatible, upgrade easily

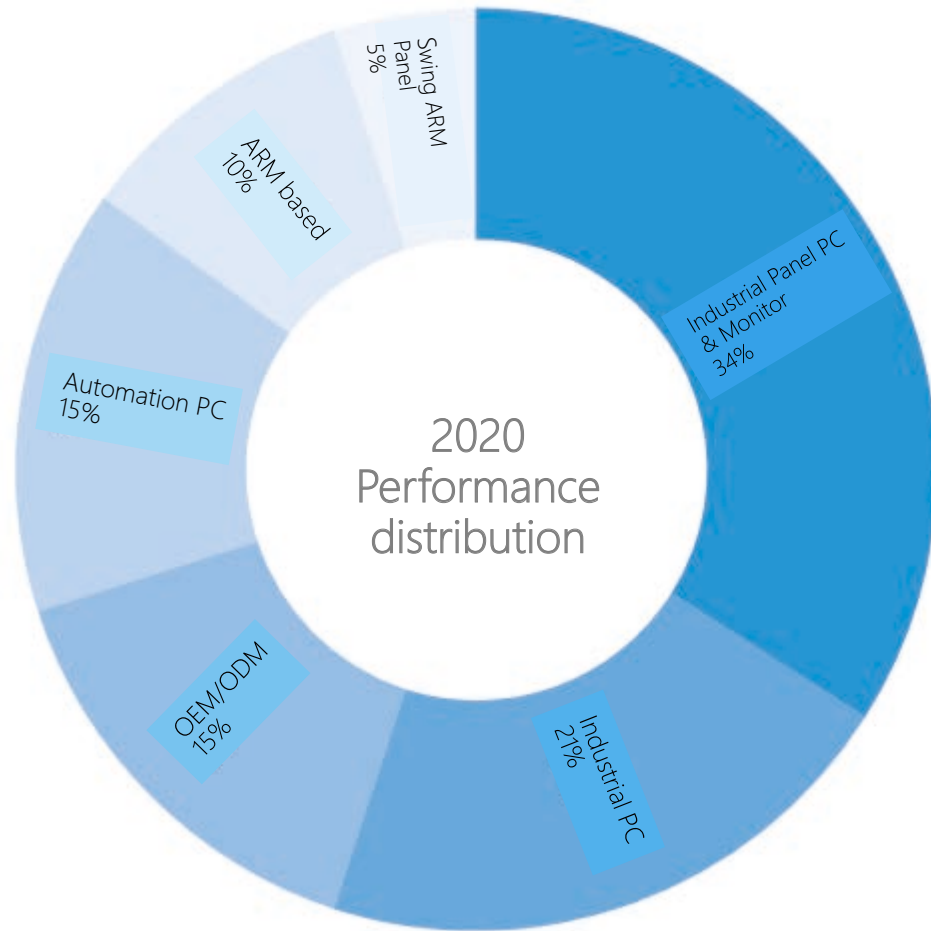
Support Intel® Atom、 Mobile and Desktop type CPU

High reliability

Offer Technical support service for courier board design



# Production Performance Distribution



**500,000+** pcs  
Cumulative sales in 2020

**+30%**

Assembling grows at a CAGR of 30% in recent 3 years

**20,000+** pcs/year  
Embedded industrial computers put into operation

**30,000+** pcs/year  
PANEL PCs put into operation

**20,000+** pcs/year  
Industrial monitors put into practice

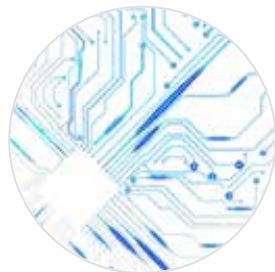




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R&D



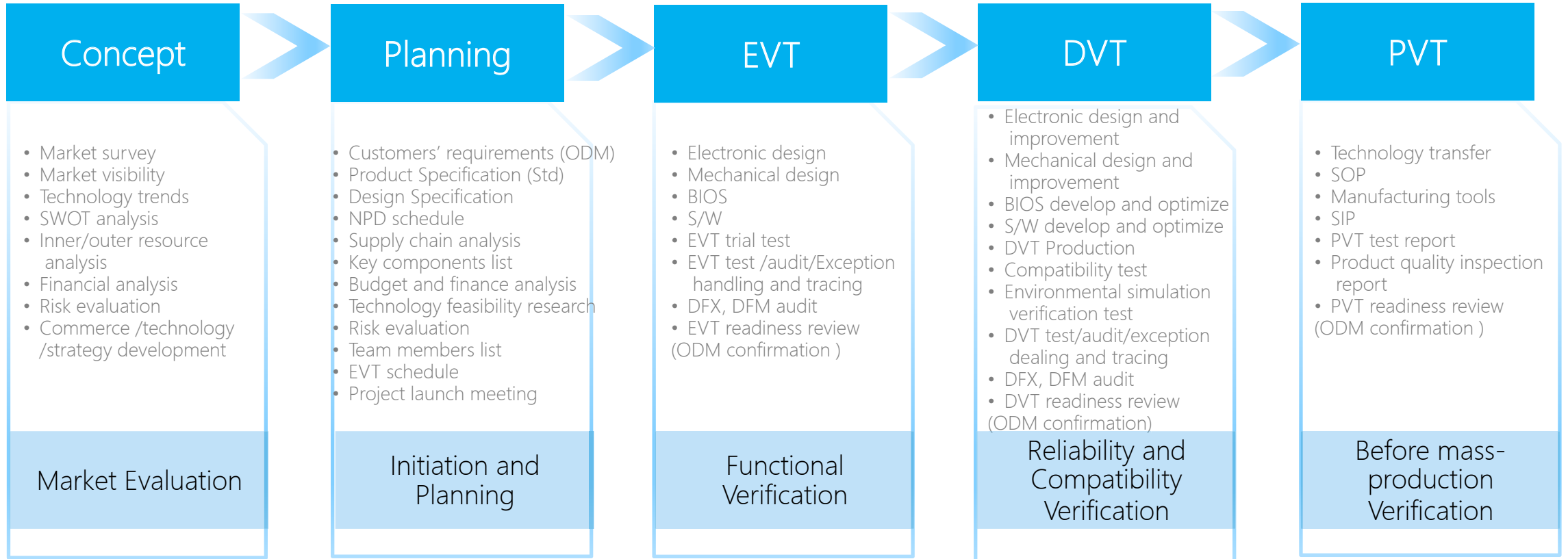
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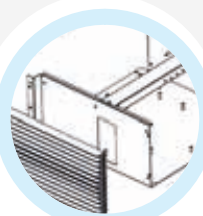


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## ID Design

Appearance  
Design



## Structure Design

PCB DXF design  
Structure design

Anti-vibration/heat  
dissipation design  
package design

## EE Circuit Design

Electronic component  
model selection

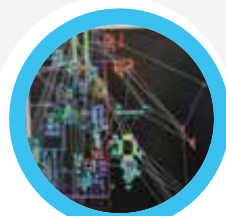
Mother/carrier  
board design

Power project  
design



## PCB Design

PCB layout



## System Integration

System model  
selection

Soft and hardware  
integration

Cable route design

Heat dissipation



## Program Design

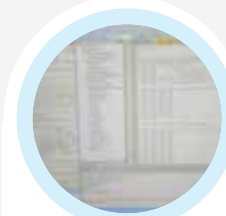
Embedded software  
framework design

Underlying code  
implementation

Application layer code  
implementation

Protocol layer code  
implementation

Program self-test and  
debug



## Test and Verification

Function and  
Reliability and  
environment test

EMC test

MTBF prediction



## Safety Certification

Pre- verification  
test

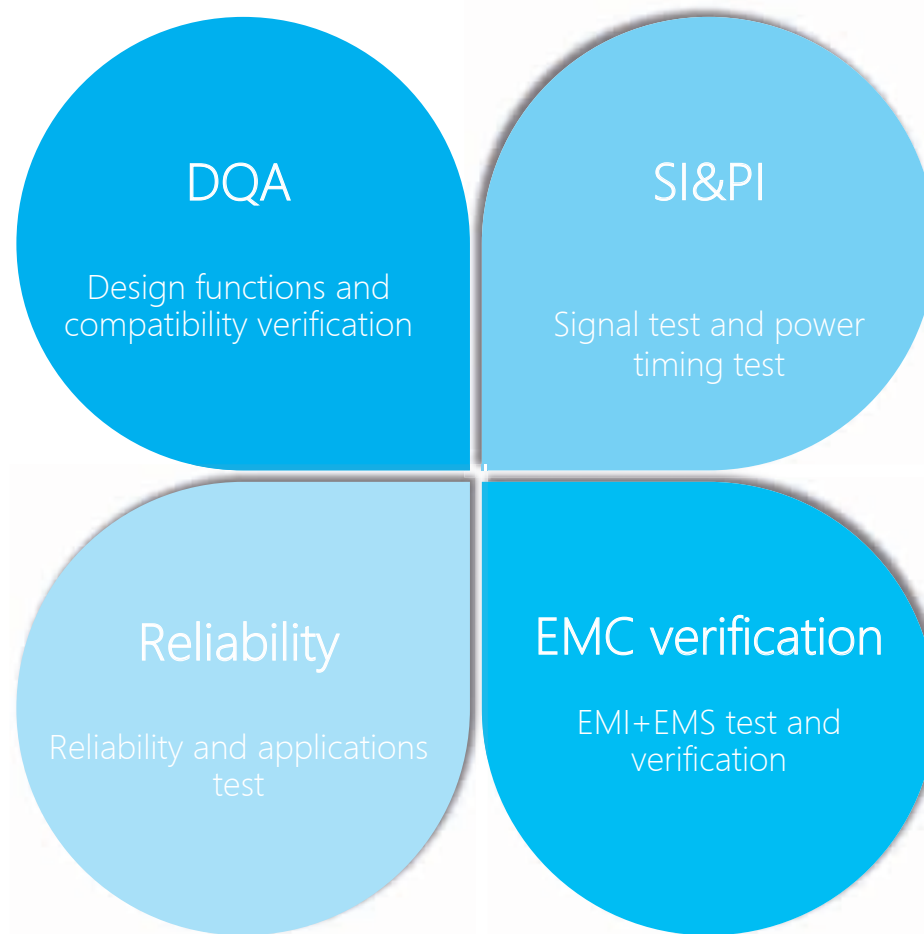
**All-round R&D Resources**

To verify if all the functions meet design targets from user's perspective

- I/O test
- ACPI、 BIOS test
- OS compatibility test
- Performance and pressure loads test
- Power supply test
- AT/ATX、 reboot test
- Illegal shutdown test
- .....

To verify if the reliability of the product meet the design targets from the application perspective

- High/low temperature operating test
- Start-up/shut down in high/low temperature test
- Storage test in high/low temperature test
- Cold boot test
- Cold shock test
- Heat-dissipation test
- Sine-on-random vibration test
- Vibration/ shock/ fall test
- Limit test
- .....appl



To verify if power supply and signal integrity meet the requirements from the perspective of design standards

- Signal integrity test
- Power supply integrity test
- Power supply timing test
- Power supply load test
- High-speed interfaces eye-diagram test
- Interfaces power supply load test
- .....

To verify if product's anti-interference ability meets design standards and regulations from the perspective of EMI

- ESD
- RE
- CE
- RS
- CS
- EFT
- Surge
- Harmonic
- DIP
- .....



# // R&D Verification System



ESD test



Surge test



Vibration test



Power supply load test



Benchmark test



High/low temperature test



Insulation test



EFT(power supply)test



EFT(signal)test



Pressure test



Vibration test



Function / compatibility test



NODKA test lab

Professional third-party test lab

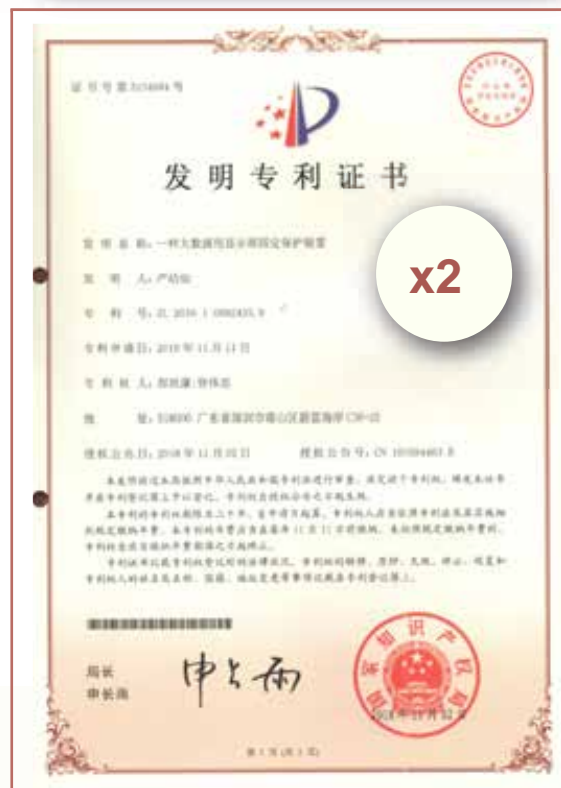
## Design Patent



x6

ZL 2018 3 0645890.0  
ZL 2018 3 0646342.X  
ZL 2020 3 0568799.0  
ZL 2021 3 0823814.6  
ZL 2021 3 0824149.2  
ZL 2021 3 0648133.0

## Invention Patent



x2

ZL 2015 1 0866479.1  
ZL 2016 1 0992433.9  
ZL 2016 2 0734441.9  
ZL 2016 2 1170659.2  
ZL 2017 2 0634195.4  
ZL 2017 2 1604592.3

## Utility Model Patent



x22

ZL 2018 2 1774081.0  
ZL 2018 2 1774034.6  
ZL 2018 2 1774057.7  
ZL 2018 2 0757156.8  
ZL 2019 2 0290597.6  
ZL 2020 2 0498753.0

## Software Copyright



x3

2016SR399864  
2016SR403119  
2018SR198064  
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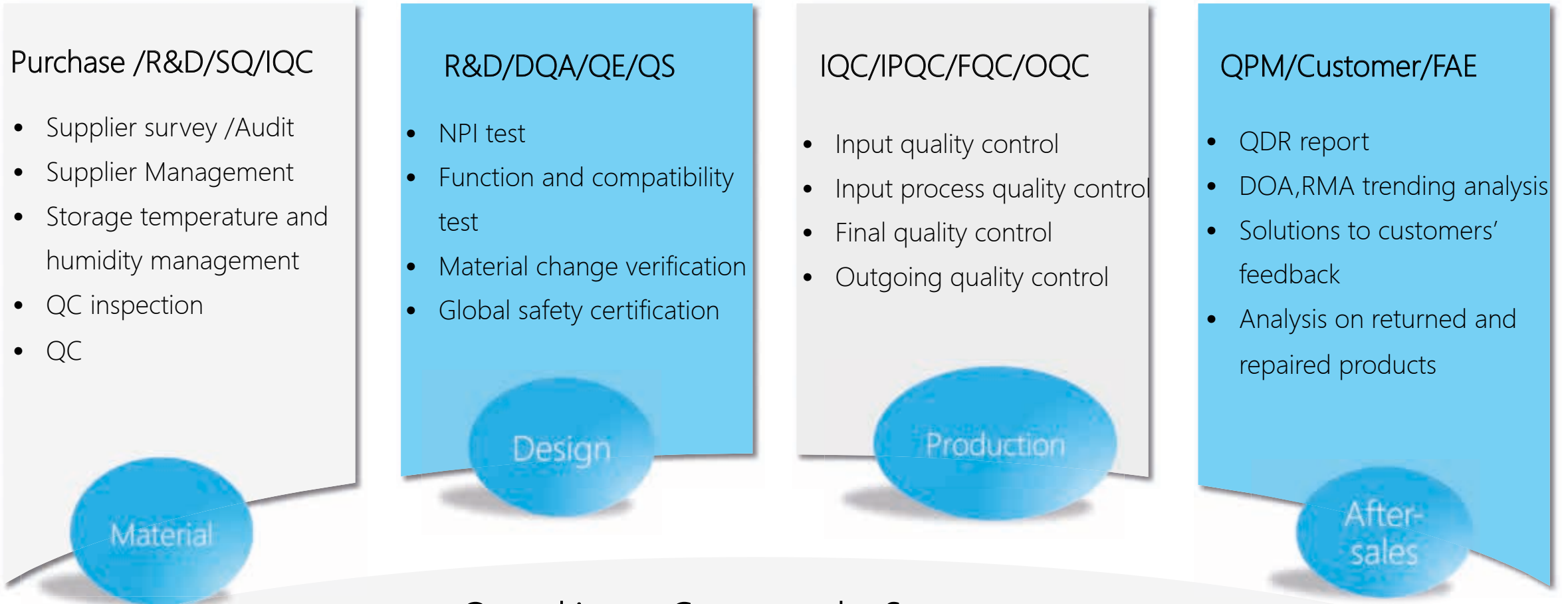
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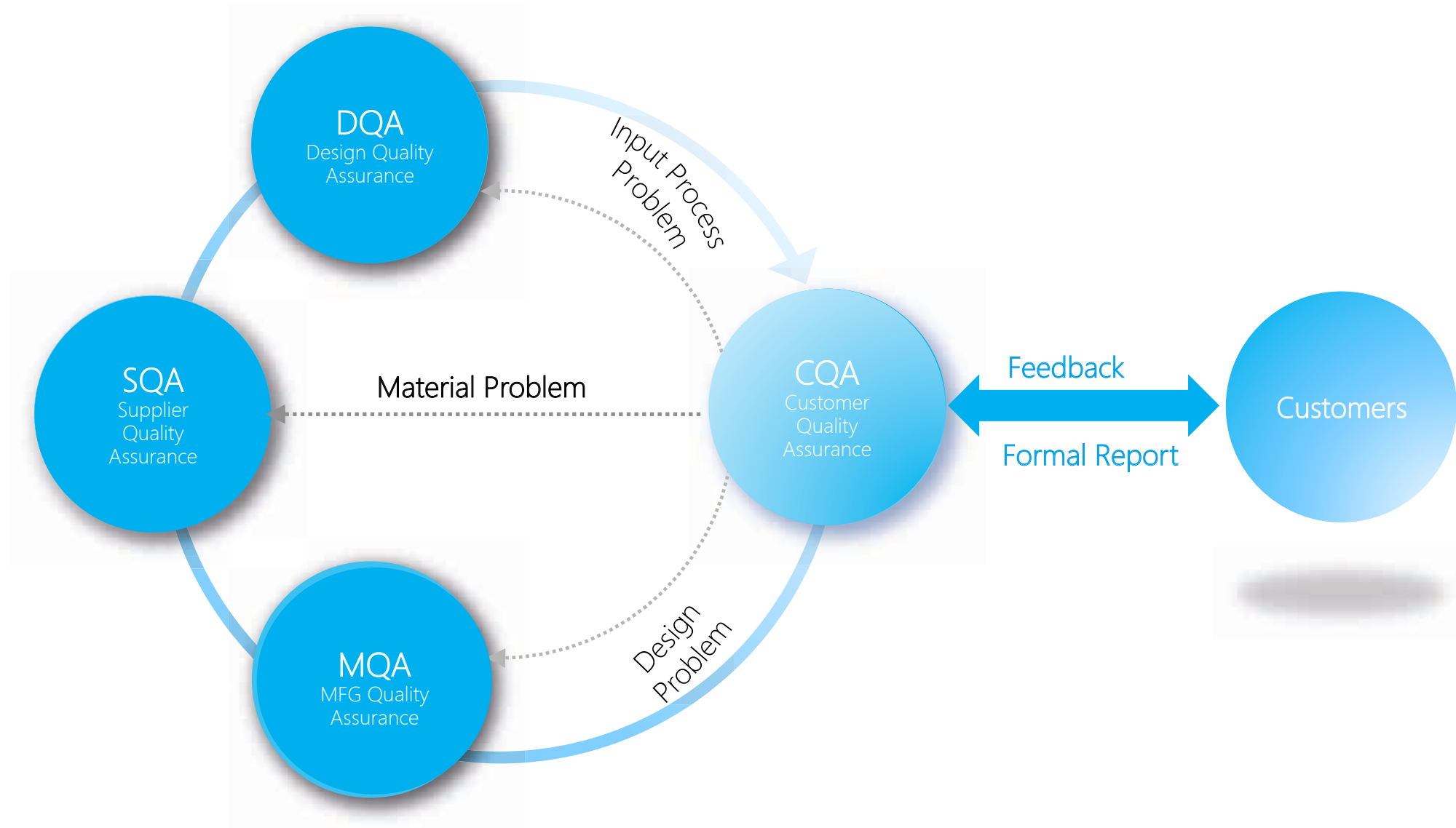
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## Quality Control System

ISO9001 : 2015



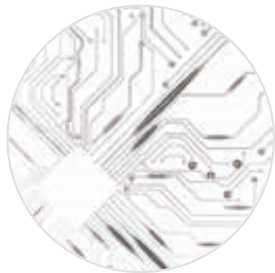




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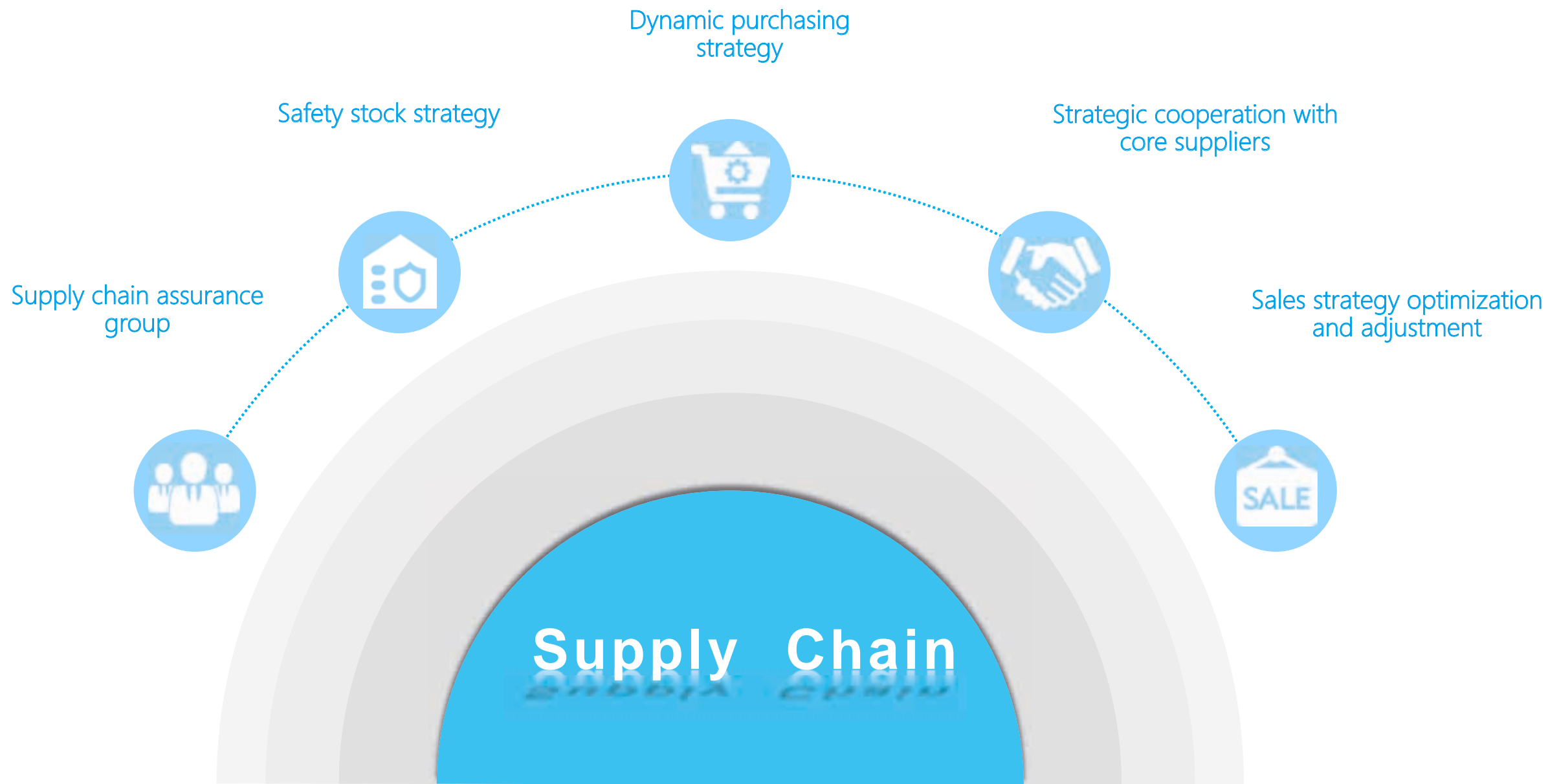
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**DELIVERY**



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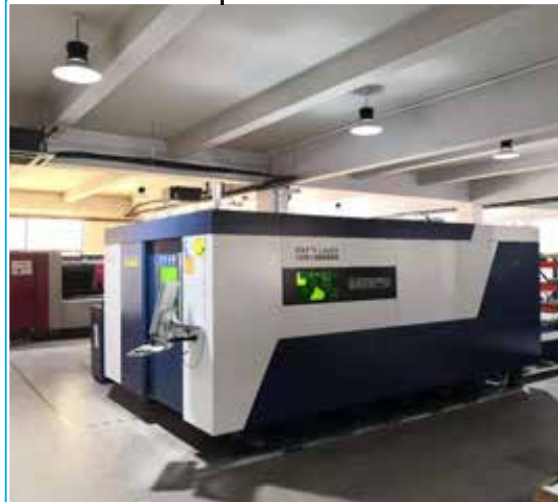


From PCBA manufacture-structure components process-system assembly  
Build a production line with diversified choices under the whole production control  
to satisfy your requirements flexibly

PCBA manufacture



Precision sheet metal  
process



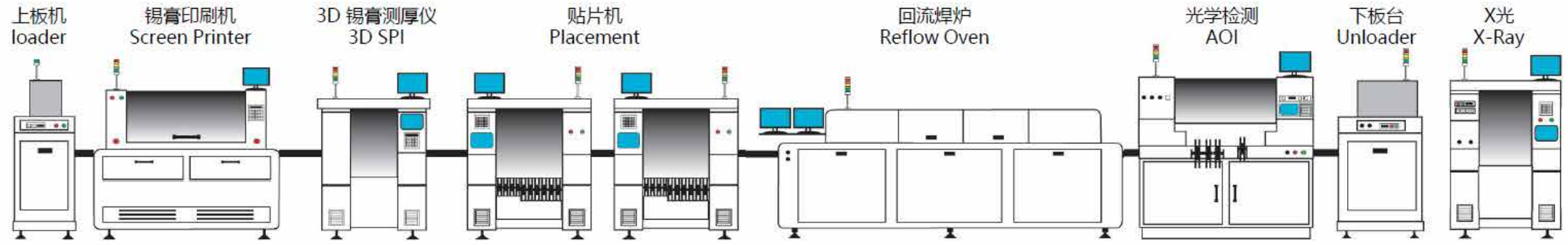
CNC process



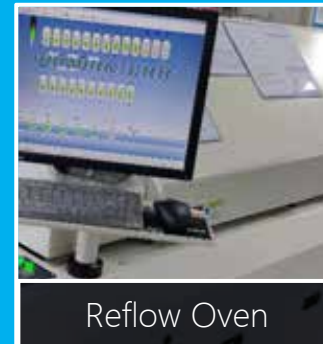
System assembly







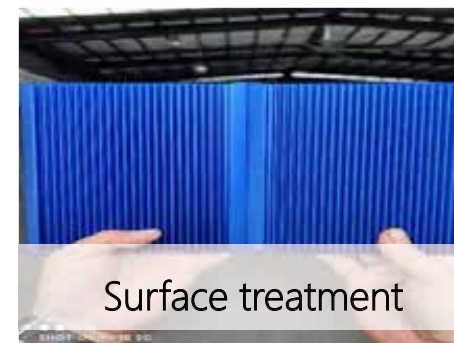
One-stop small amount and diversified PCBA production line



# Precision sheet metal processing



Precision sheet metal processing production line  
High-power laser cutting machines ( 2 PCS)  
drilling machine  
rivet driver  
bender







CNC machining center is equipped with 12 CNC machine tools to meet a small number of diversified production needs flexibly.







The minimum daily capacity  
1000 PCS

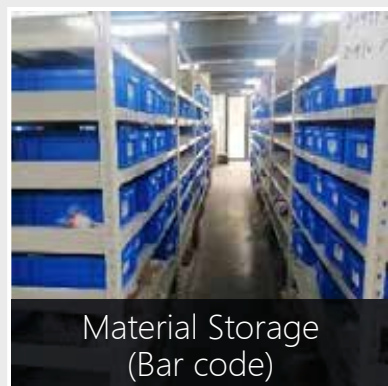
Two working modes, the assembly line work  
and one-stop work , are shifted flexibly  
according to the order situations.



Confidential workshop



System controlled  
production



Material Storage  
(Bar code)



Clean Room  
(Screen assembling)



System Assembly  
(SFC Control)



Burn-In Process  
(45°C burn-in room)



Test  
(Full function test)





1# workshop	Precision Machinery plant
2# workshop	Painting plant
3# workshop	SMT plant
4# workshop	System assembly plant
5#	Warehouse
6#	Logistics center
7#	Staff dormitory
8#	Fire control center



**ABOUT US**



**PRODUCTION**



**R&D**



**QUALITY**



**DELIVERY**



**SERVICE**









# International Exhibitions





## Professional Pre-sale



**Free** Technical Consult  
**1 VS 1** Service

## Reliable After-sale



**Exclusive** CSR  
**Quick** Response

## Quality Assurance



**Two Year** Free Warranty  
**Lifelong** maintenance



International Service Center: 0086-21-6494  
0909



$$1 + 1 > 2$$

To create a win-win cooperation  
by combining superior resources from NODKA with  
your areas of expertise.