COMPANY INTRODUCTION







Nodka





Founded on March, 2001 in Shanghai



- Headquarter in Suzhou, Jiangsu Province, China
- **450+ employees,** 25% for R&D
- Revenue RMB 350 Million in 2022



 \sim

Vision: To become the world leading manufacture in IPC & HMI Platform



Worldwide Expansion





Strong Capacity in manufacture to support global expansion

- Nodka has built manufacture center in Jiangsu and Anhui Province. R&D center in Shenzhen, Kunshan, and Suzhou. 17 offices in China. Nodka has the capacity for global expansion in both manufacture and technology.
- Overseas office is based in the Netherlands as sales and service for EU region.
- Sales partners in 19 countries such as, USA, Japan, Egypt and Singapore, covering 30+ countries.





3 R&D Center





15 + Sales company **19** partners, covering **30** countries

Global Partner





History



NODKA诺达佳

Target Industry



Traditional Automation

Machine Vision & Motion Control, Industrial IoT terminal, Data collection and monitoring power automation

Commercial automation Medical equipment

Outdoor application 7x24 hours work Unattended Medical equipment

Military/Trans portation

Turnstile control Automated ticket machine Fire alarm system Integrated monitoring system



Product Positioning





Product Delivery Type



	OEM	ODM
Standard Multiple standard product • Sufficient inventory to meet the need of customer • Years of industrial experience for bulk sale	 DEM Based on standard product Diversified OEM options with no MOQ limitation Customized logo/screen printing Manufacturing capacity for short delivery time 	 Based on customer requests Design products based on the requests from customers Flexible modular design with short development cycle With the capacity of R & D and manufacturing, shorten the delivery time
Inventory for standard product Immediate delivery	Full manufacturing capacity, OEM and customization Delivery: start from 7 days	Modular design, full process capacity Shortest delivery time in the same area

Nodka's flexible full manufacturing process can meet the needs of diversity product requests with no MOQ limitation.



Nodka product full-line







Industrial Computer Series





IPC Series

Embedded Industrial Computer Series

- Introduction: wall-mounting and desktop-mounting. Support multiple platforms and configurations. Available for different types of expansion
- Product type: IPC615G Series, IPC615H Series, PCBOX Series
- Highlight: durable products applied for multiple industrial control cabinet. Flexible for wall and desktop mounting as well as the expansion. Possible for simple upgrade when needed.

eBox Series

Automation Control System





Automation Control System Series

- Application: Automation, vision and motion control, AGV
- Product type: Automation PC Series, Agile PAC Series, EtherCAT industrial I/O module, eLink date transmission, UPS uninterruptable power module
- Nodka automation Control system provide intelligent gate and fieldbus connection for A lot IoT. Provide max flexibility and scalability for the control, inspection and data collection of factory.



Automation PC Series



Industrial I/O module



Agile PAC Series



eLink Data Transmission



UPS uninterruptable

Industrial Panel PC & Monitor Series





Industrial Panel PC & Monitor Series

Screen size options: 8" - 12" . Options for Resistive and Capacity touchscreens



Customized film and frame

DC12/24Vwide

voltage input

VESA mounting

-20-+60C working environment

IP65 water/dust proof

Embedded



Industrial Panel PC & Monitor Series





TPC6000-XXX2 Onboard Intel Celeron J1900

TPC6000-XXX3 COMLAC Intel Celeron J6412

TPC6000-XXX4 COMLAC Fan and Fanless option Intel 6/7/8th core i Intel 10/11th core i

Operation Panel Series





Operation Panel Series

- Application: automation, machine tool, food industry
- Product type: ICP69/59 Series, TPC6000 Series, LC5000 Series
- Multiple touchscreen, interface and mounting options.
 Corresponding functions can be added upon request. 100% integrate with standard industrial Panel PC and monitor.
 Designed to operate in harsh industrial environment, such as shock, vibrate and extreme working temperature.



Industrial Motherboard Series





Industrial Motherboard Series

- X86/ARM hardware for multiple platform
- Motherboard and embedded SBC are designed to fit different applications of clients
- COMLAC modular design provides: type3 for low power consumption and type5 for high performance. Nodka is capable to provide customized carrier board and create professional hardware to customers.

Industrial Motherboard Series





3.5" SBC Series





COMLAC core module

Non-standard custom-made

ARM Series





ARM Series

- Application: automation, machine tool, food industry
- Product type: Box PC Series, TPC6000 series, 3.5" SBC series
- Multiple touchscreen, interface and mounting options.
 Corresponding functions can be added upon request. 100% integrate with standard industrial Panel PC and monitor.
 Designed to operate in harsh industrial environment, such as shock, vibrate and extreme working temperature.



Network Security Platform





Network Security Platform

- Application: network gatekeeper
- Product: domestic platform
- Highlight: Xinchuang hardware platform, based on X86 platform. Industrial fanless series with network expansion card.



COMLAC Core Module Highlight





Modular design solution is a quick way from design to production

Innovation Honor





Control System Honor 2018, 17th automation annual review2019, 18th automation annual review ICP69 & IDP59 Series industrial control panel

Control System Honor NP series automation control computer

Automation Innovation Honor 2020, 20th automation annual review **TPC6000-CXX4** New human-computer Interface panel

Automation Innovation Honor

2023, 21st automation annual review

AM Series IO Module



Research Center





Kunshan Motherboard and ODM hardware development

X86/ARM motherboard development ODM product development x86/ARM technology and trend



Shenzhen Software research center

Android/Linux application development



Suzhou System & application research

Machine/carrier board/IO development System-level application development Industrial and field experience



Product Development Capacity





New Product Development(NPI) Process Control



Concept	Planning	EVT	DVT	Ρ٧Τ
 Market survey Market visibility Technical trend SWOT analysis Internal/external resource analysis Financial analysis Risk analysis Commercial/technolo gy/strategy development 	 Customer requests (ODM) Product specification (Std) Design specification Development timeline Supply chain analysis Key component list Budget and finance analysis Technology feasibility research Risk analysis Team member list EVT test plan Project meeting 	 Electronic design (design & layout) Structure design (function & appearance) BIOS development S/W development (frame/ protocol) EVT production trial EVT test/audit/exception handling and tracking DFX, DFM audit Import audit of EVT (ODM need approval of client) 	 Electricity design and improvement Structure design and improvement BIOS development and optimization S/W development and optimization DVT manufacture Environment simulation test verification Compatibility test DVT test/audit/exception handling and tracking DFX, DFM audit DVT finish audit (ODM need approval of client) 	 Technology transfer Standard operation procedure (SOP) Manufacturing tool Quality standard operation procedure (SIP) PVT test report Product quality inspection report Import audit of PVT (ODM need approval of client)
Market assessment	Project plan	Functional verification	Reliable and compatible verification	Human-machine material verification before production

*NPI=New Product Introduction

ODM/OEM requires the approval from client on each procedure

Development design quality guarantee





The test equipment in Nodka's laboratory includes functional, reliability, compatibility, surge, EFT, ESD, vibration, drop, current load, reference, temperature shock, insulation, withstand voltage, windless convection, etc. By cooperation with the third-party laboratory, Nodka has developed a relatively complete R&D and test capability.



Development design quality guarantee



Design and Compatibility Verification

From the customer point of view, Verify if the product functions meet design standard

I/O interface and compatible test, ACPI test BIOS test, OS compatible test, performance and stress load test

Power supply test, power on/off rest(AT/ATX、reboot), abnormal power off test

Signal Integrity & power measurement

From the design point of view, Verify if the power and signal are integrity.

Signal integrity test, power integrity test Power supply timing test, power loading test High-speed interface eye diagram test, interface power supply loading text

.

.

•••••

Reliability & environmental test

From the environment point, Verify if the product reliability meet design standard

High/low operating temperature test, power on/off for high/low temperature test High/low temperature storage test, cold start test, hot/cold switch test

Heat dissipation test, sine and random vibration test Vibrate, impact, and drop test, extreme test

EMC & Verification

From electromagnetic interface side, verify if the product interface and anti-interference meet design standard

ESD static electricity test, RE radiation disturbance test, CE conducted disturbance test RS and S radio frequency radiation anti-interference EFT electrical fast transient pulse group anti-interference test, Surge lighting anti-interference test, Harmonic current, DIP voltage drop test



Nodka Manufacture Center



Guangde, Anhui Province

Suzhou, Jiangsu Province



To build small and diversity production lines; flexibly to meet customers' delivery requests

PCBA Production Center





Whole site PCBA production Small quantity diversified flexible production

- 2 SMT production line (3 under construction)
- 7x24 hours production
- Full production capacity such as automatic patching, printing, online inspection, reflow soldering wave soldering and three proof, etc.



Metal Sheet Processing area





CNC Production







Surface Treatment Workshop



Spray line

Nodka has built an environmental friendly spray workshop, with the capacity of polishing, painting, silk screen printing, etc. 24 hours production to meet the custommade projects for any color and printing content

Anodizing Line

Nodka has built for the first time an inclusive environmental friendly semi-automatic anodizing workshop, with the capacity of grinding, sandblasting, drawing, anodizing and dyeing. Comparing to the traditional line, Nodka's oxidized wire body uses multiple ultrasonic cleaning and special manufacturing procedure. All guarantee quality, color and delivery

System Assemble Line





Mass Assemble line

- 3 production mode: mass assemble line, small-volume assembly line, and one-stop operation line.
 Production can switch quickly to meet the needs of complex and changing requirements
- The confidential workshop meet the special assembly requirements of customers







Quality Control





Closed-loop Quality Control



