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**鑫禾科技股份有限公司**

**Sinher Technology Inc.**

**(Company Code:4999)**

**Status Report and Future Prospect**

**2024/11/20**



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- 3. Business philosophy and performance**
- 4. Competitiveness, strategy and future prospects**



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# 1. Company overview



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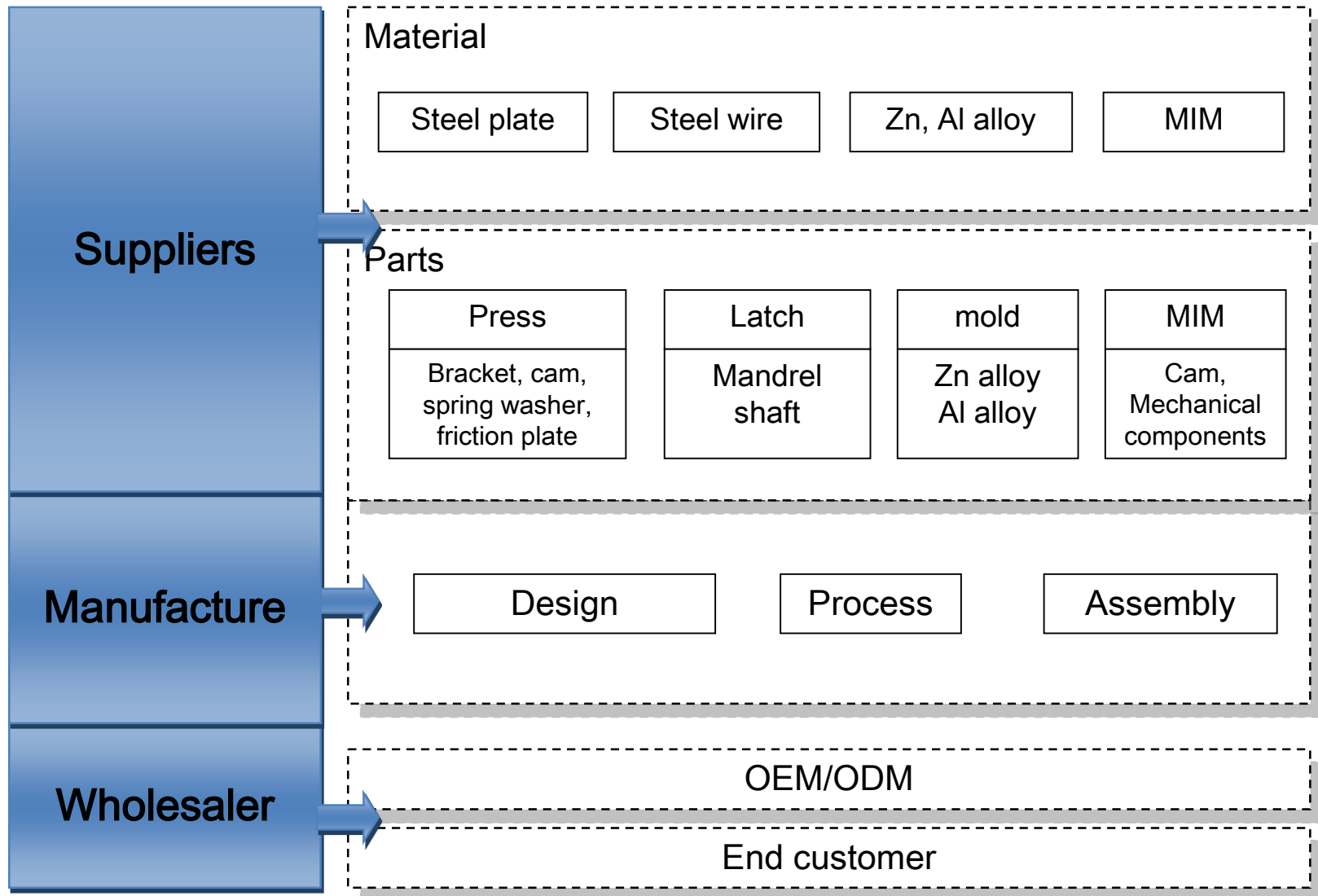
# Company overview

- **Established: Jan/2002**
- **Capital: NTD 740 millions**
- **Location: Taiwan, Kunshan, Chongqing , Thai Binh City Vietnam**
- **Business: Hinge development, manufacture and marketing on key component**
- **Cooperate employee: total of 1,539 with 283 in head quarter (up to Oct/2024)**



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# Manufacture process





# SNR Company history

2002 Company established

2008 Kunshan Wanhe established and introduce stamping production line

2009 Sinher introduce multi-axis CNC lathe machine

2011 Kunshan Wanhe introduce Zn alloy die cast production and Sinher Chongqing established

2012 Sinher introduce CNC integrated processing machine production line

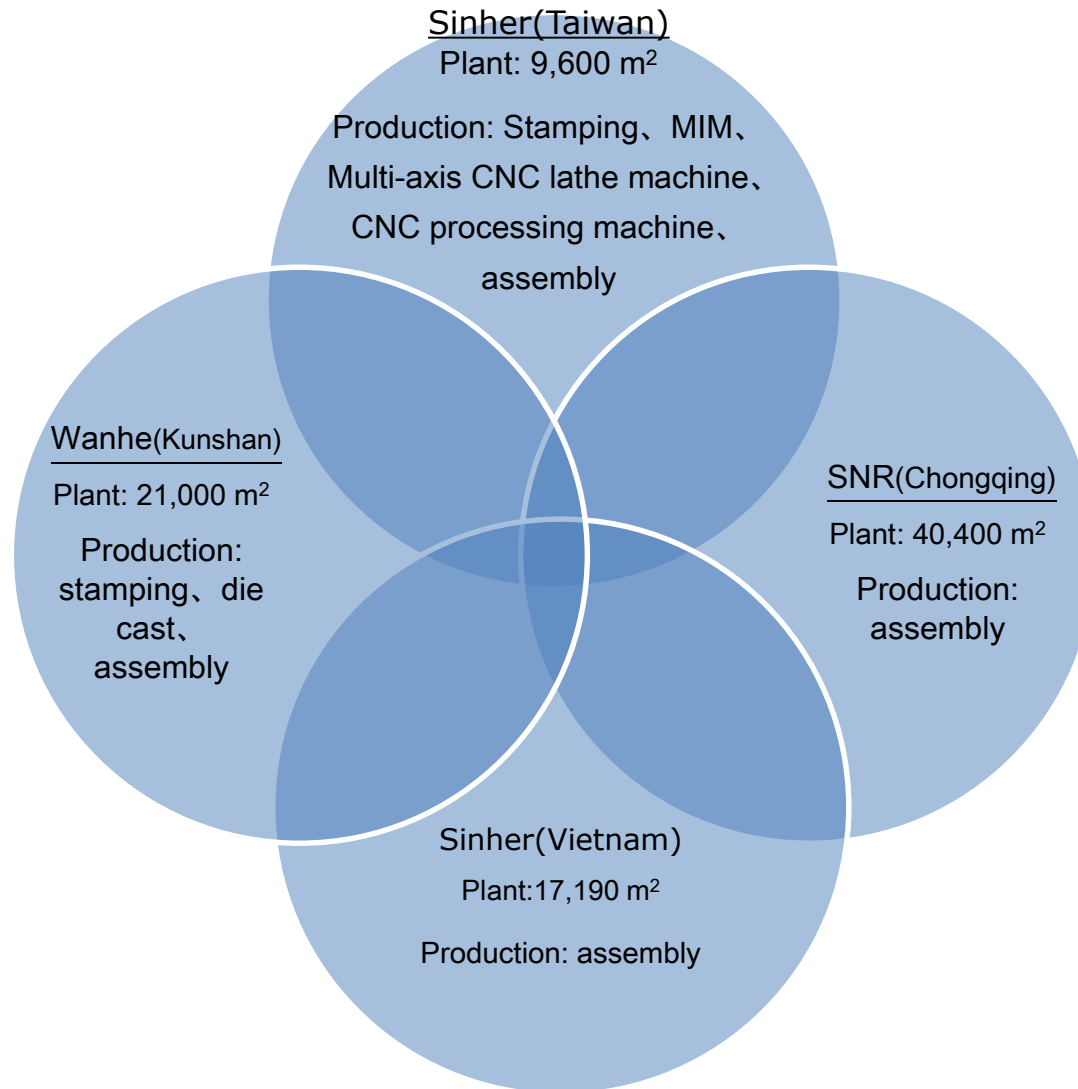
2014 Acquire Xizhi plant to expand and intergrade multi-axis CNC lathe machine production base

2016 Acquire Keelung plant and introduce MIM production line

2024 Sinher Technology Vietnam established and introduce assembly production line



# SNR Production base





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## 2. Products and market Overview





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## Product



### Notebook Hinge

- Auto lock
- Warp
- Variable torque
- One hand open
- MIM warp
- Press-in



### Convertible and Detachable

- Foldable
- 360
- Slider
- Track
- Lift
- External Torque

Adjustment



### All In One Hinge

- Fixed
- Multi-axis
- Frame
- Slider



### 3C Hinge & Others

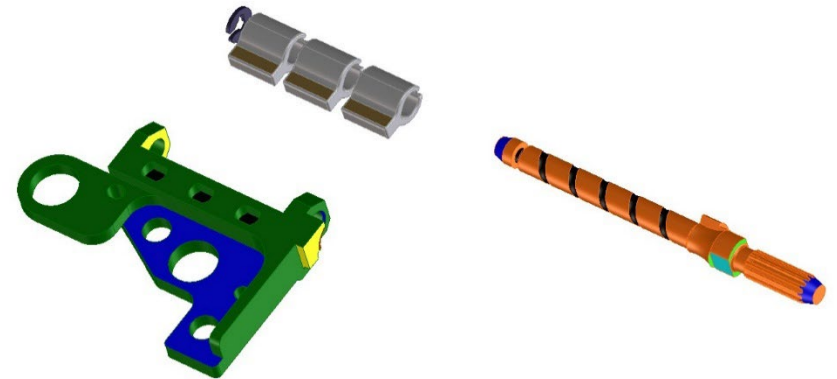
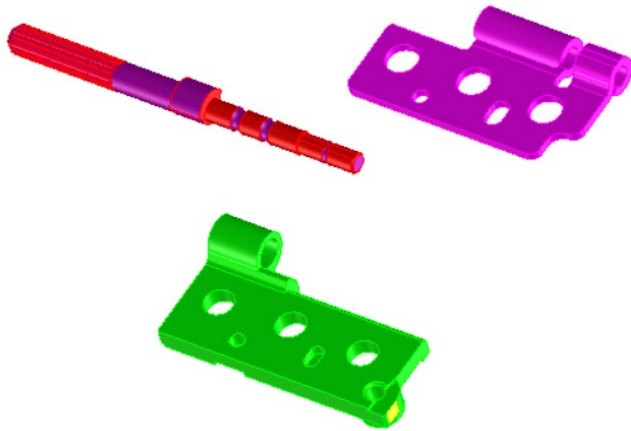
- Cashier
- Projector
- Car use
- AR/VR glass
- MIM product
- Touch pad



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## NB Hinge

Press-In Hinge  
Warp type with MIM structure

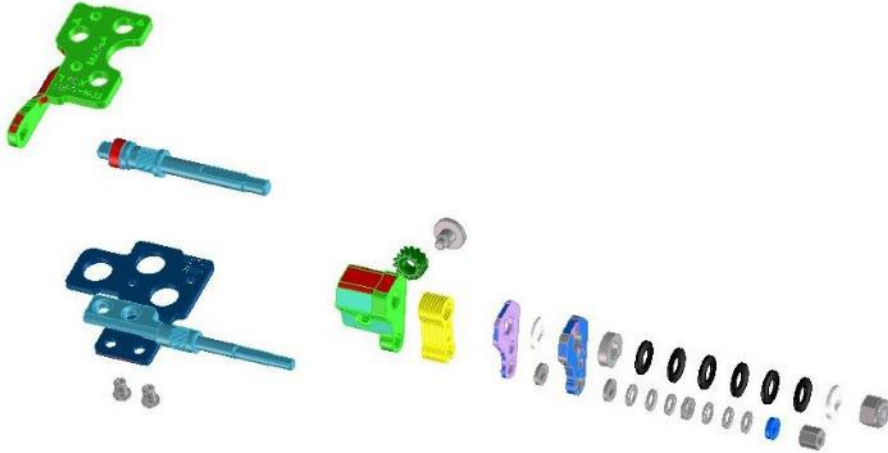




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## NB Hinge

### 360° Hinge

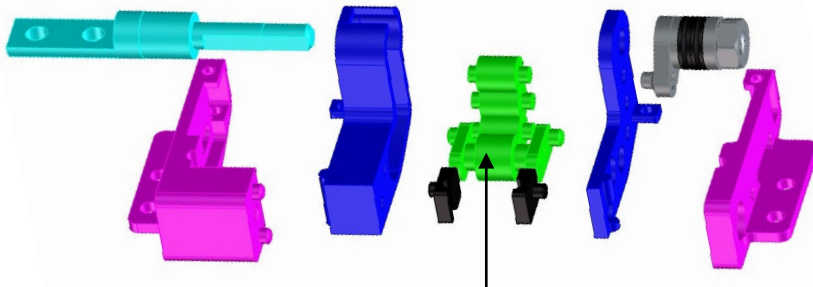




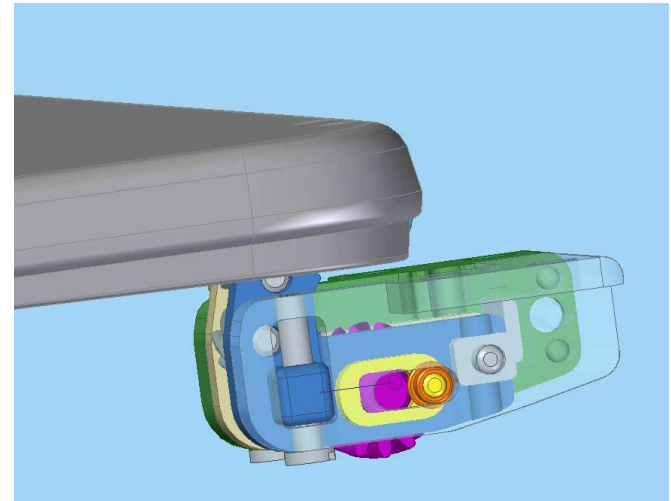
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## NB Hinge

### Lift Hinge



Gear Transmission  
Mechanism



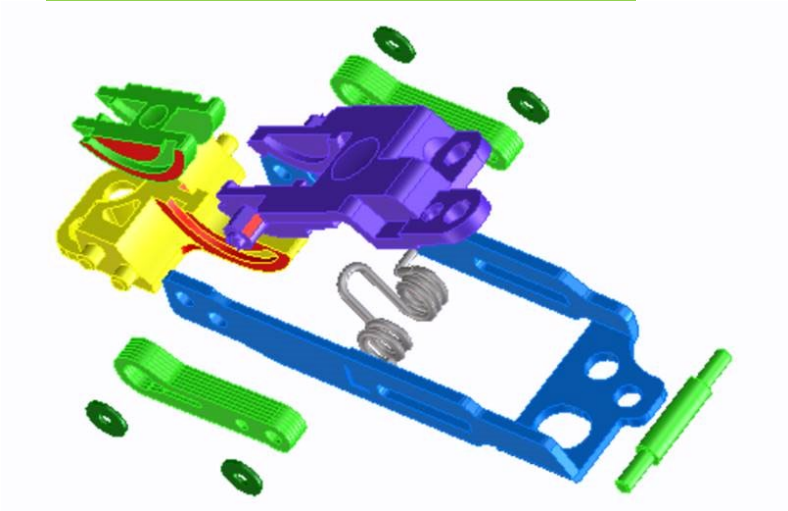
1. **Design Concept:** When opening the LCD, the gear transmission mechanism will operate when the hinge rotates, in order to lift up the height of 1.8~2mm between the LCD and System.
2. **Status:** Structure development done. Ready for Mass Production.



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## PAD Hinge

### Slider pad Hinge

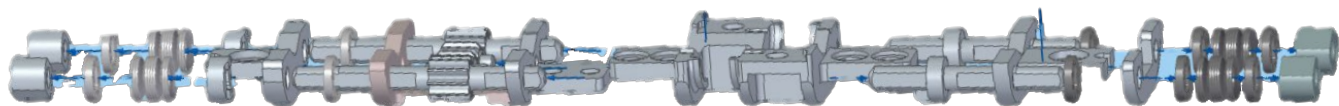
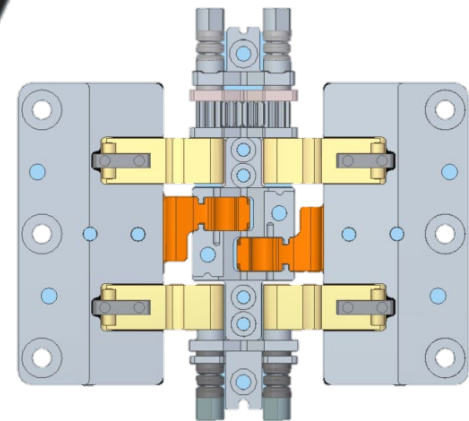
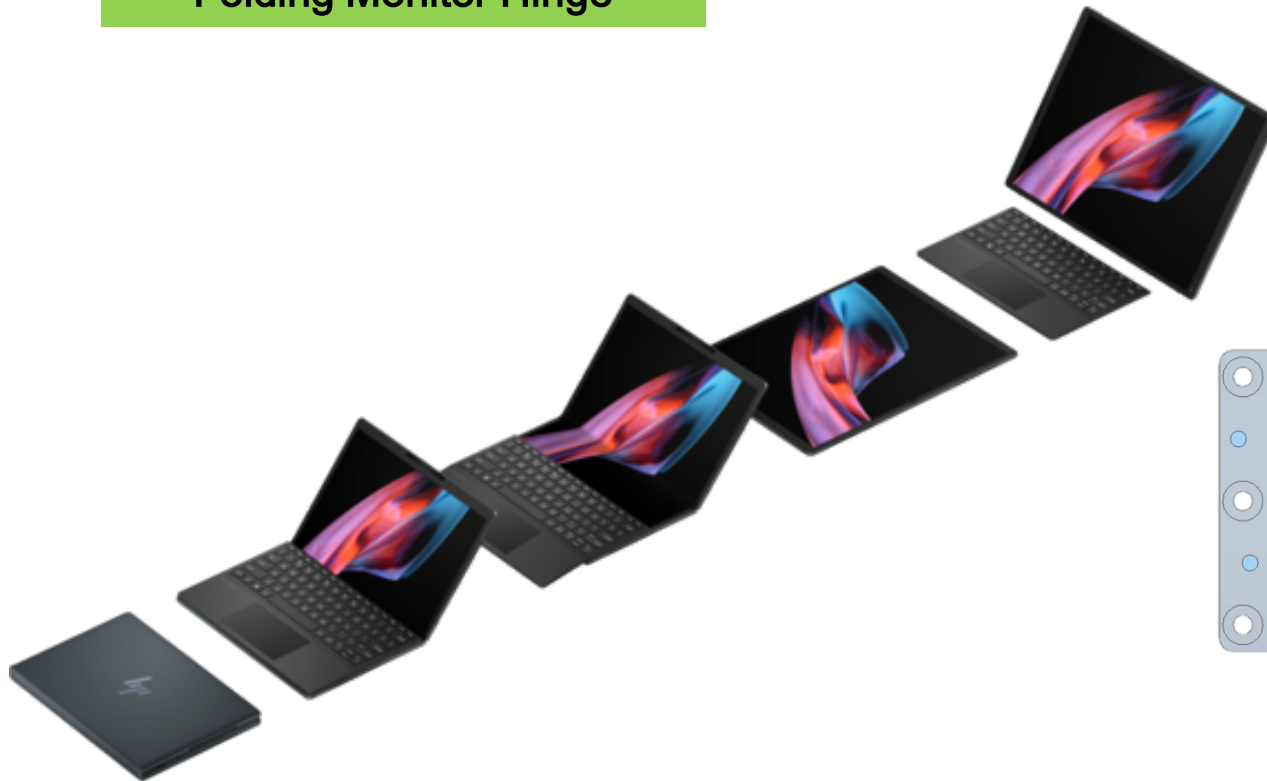




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# Folding Monitor Hinge

## Folding Monitor Hinge





## Automation Development Status

Hinge Components  
Pre-positioning



Automatic  
Assembly



Automatic Hinge  
Torque  
Measurement



Automatic Hinge  
Size  
Measurement



## Common Parts Automatic Sorting Production Line

Common Parts Automatic Sorting  
Production Line



Common Parts Automatic Sorting  
Equipment







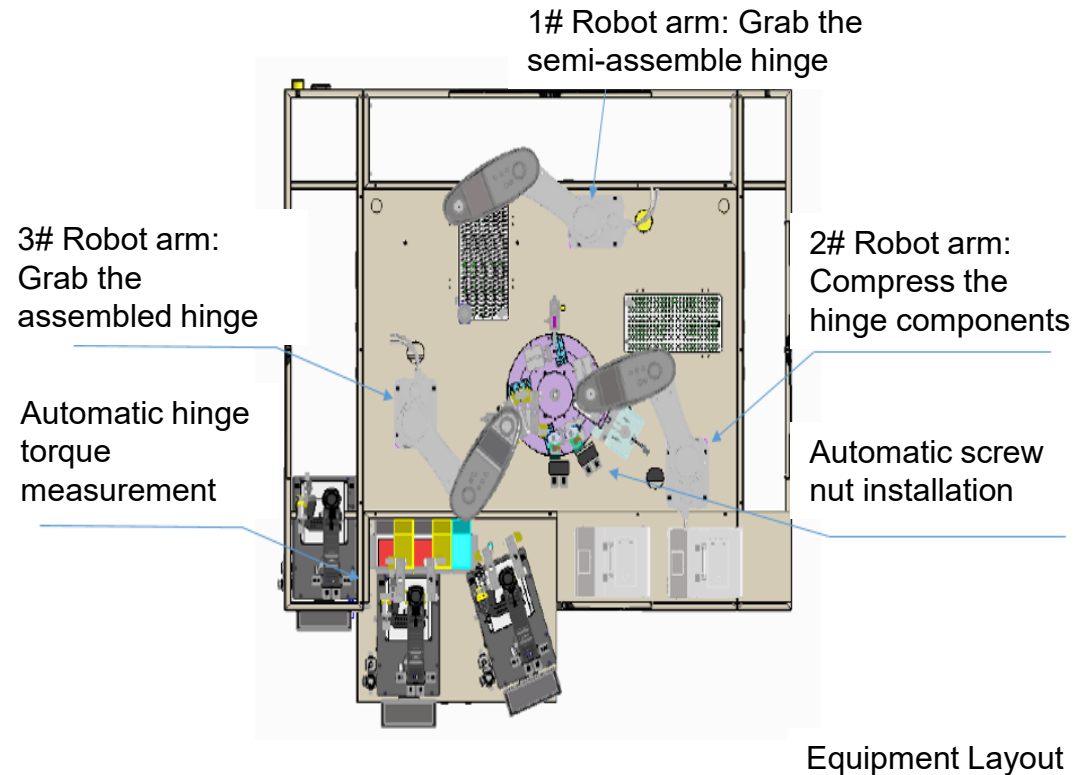
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# Automatic Assembly System

## Automatic Assembly Line



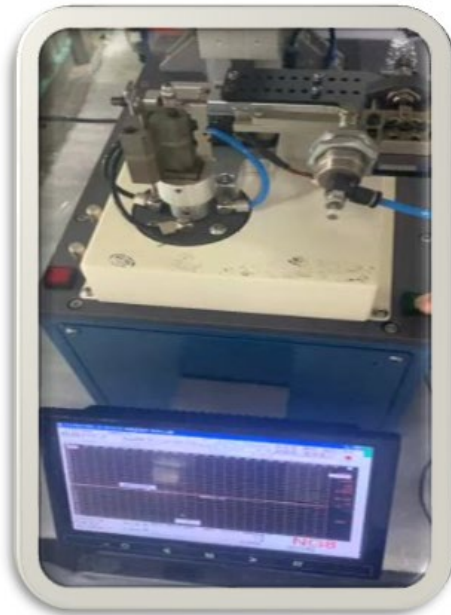
## Automatic Assembly Equipment



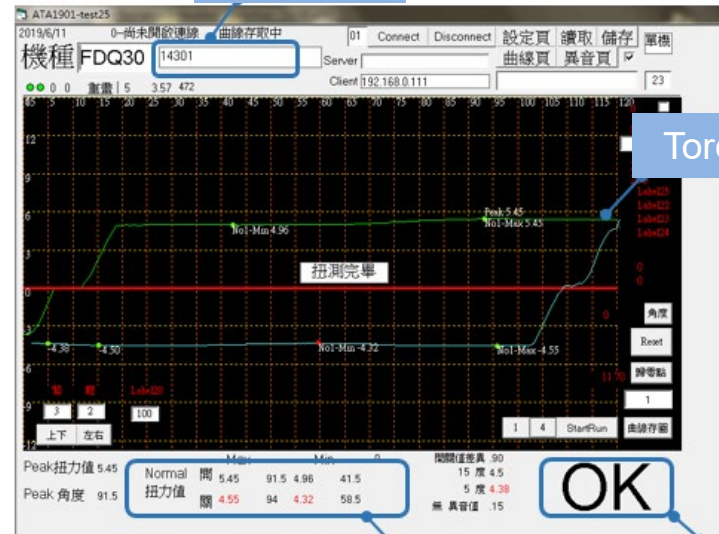


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# Automatic Hinge Torque Measurement



Serial no.



Torque profile

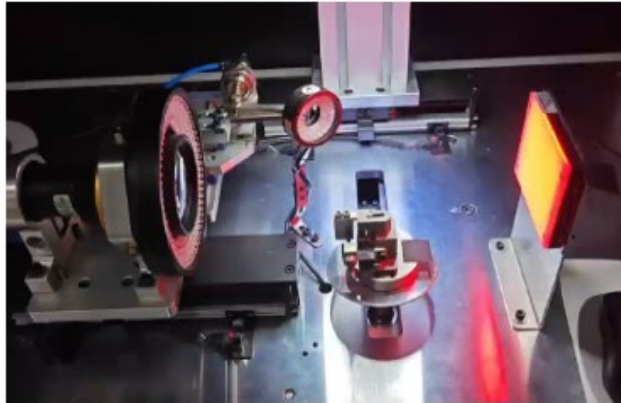
Test Data

Test Result

- ◆ Automatic data interpretation and result judgment
- ◆ Test data presenting on time
- ◆ Test data reached by serial no. (include torque curve chart)



## Automatic Hinge Size Measurement (AOI)



- ◆ 2pcs 500 million pixel CMOS (Basler acA2500)
- ◆ Scan QR code and scan 4 appointed sizes simultaneously
- ◆ Data tracking by QR code



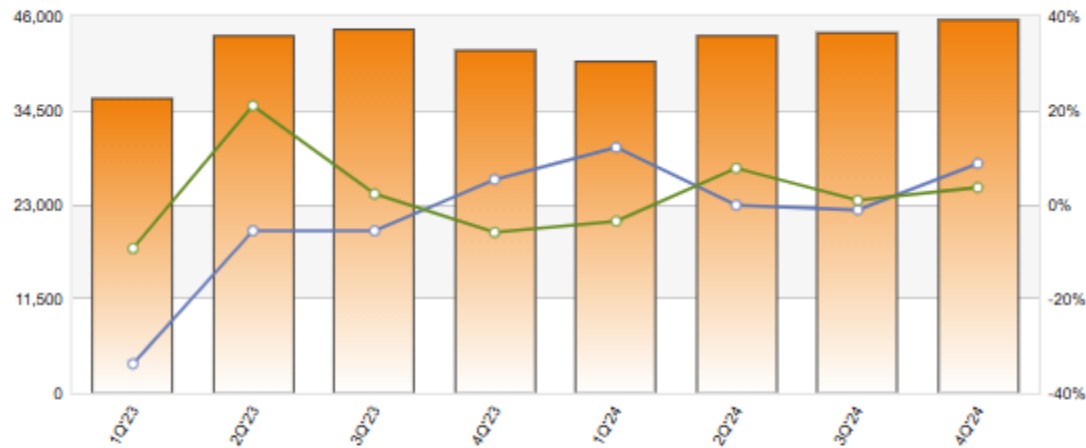
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## NB market share

### Shipments

1Q'23~4Q'24 全球NB出貨量

Unit : (k units)



	1Q'23	2Q'23	3Q'23	4Q'23	1Q'24	2Q'24	3Q'24	4Q'24
Worldwide	35,958	43,467	44,395	41,800	40,349	43,482	43,875	45,465
YoY	-33.9	-5.5	-5.5	5.2	12.2	0	-1.2	8.8
QoQ	-9.5	20.9	2.1	-5.8	-3.5	7.8	0.9	3.6

1. DIGITIMES Research considers detachable devices as tablets and are not included in NB shipments.

2. Figures are updated at the end of January, April, July and October.

Last updated : 2024/07/30

In 2023, NB shipments were 165 million units. Shipments are estimated to reach 174 million units in 2024 and grow by 4-5% in 2025 to 181 million units, according to data from DigiTimes.



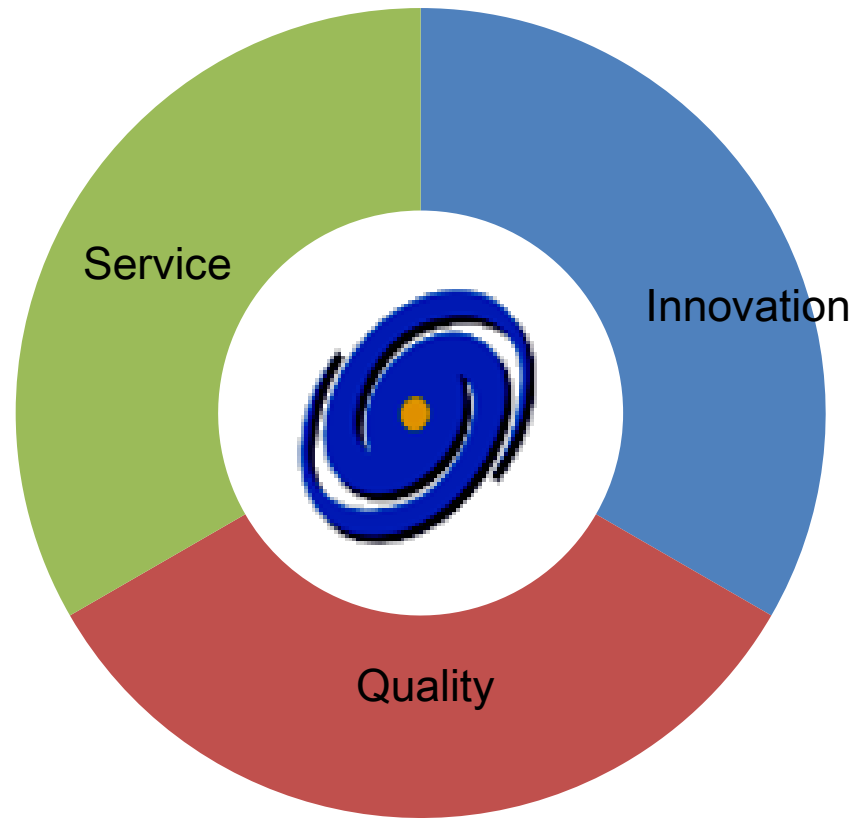
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### **3. Business philosophy and performance**



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# Business philosophy



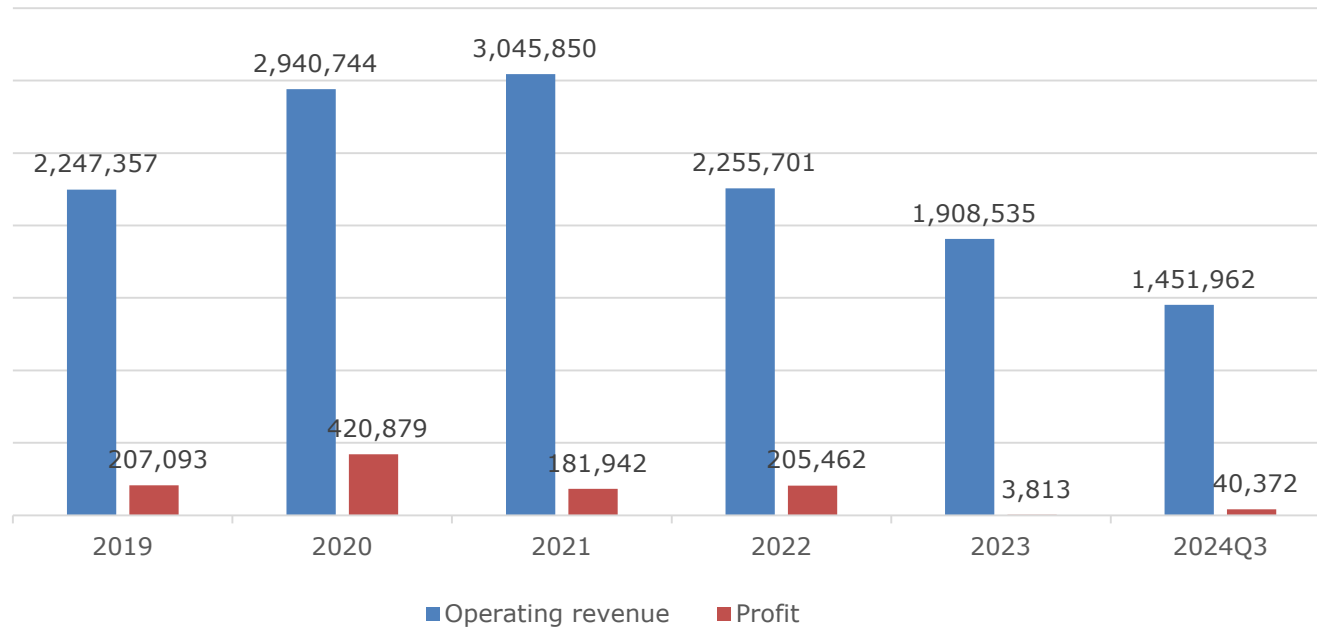


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# Performance

## Operating revenue and Profit

Unit:NT\$ thousands



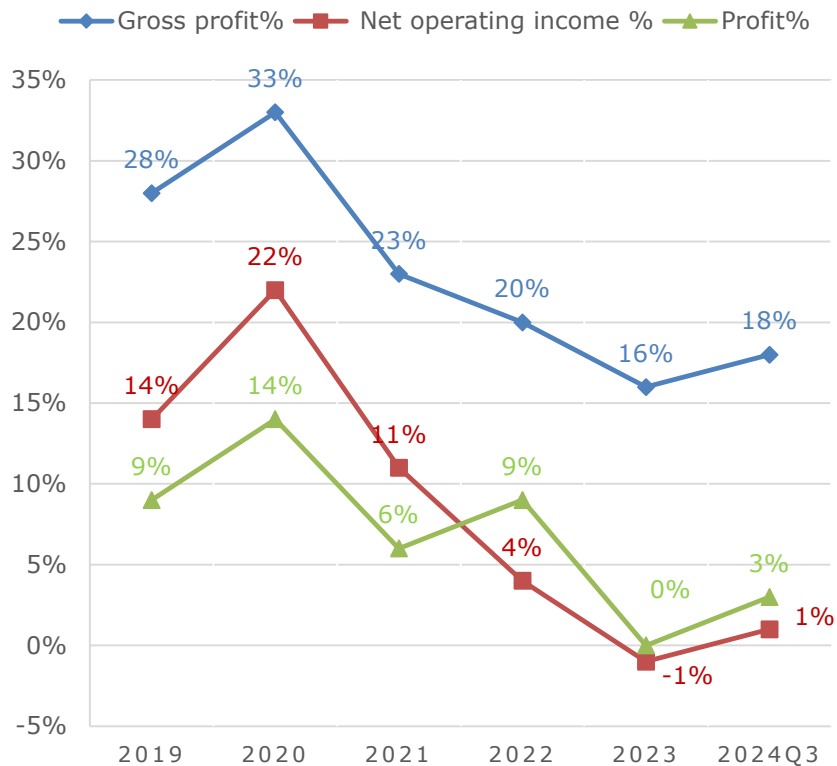
Source: Financial reports audited (reviewed quarterly) by CPA for each year



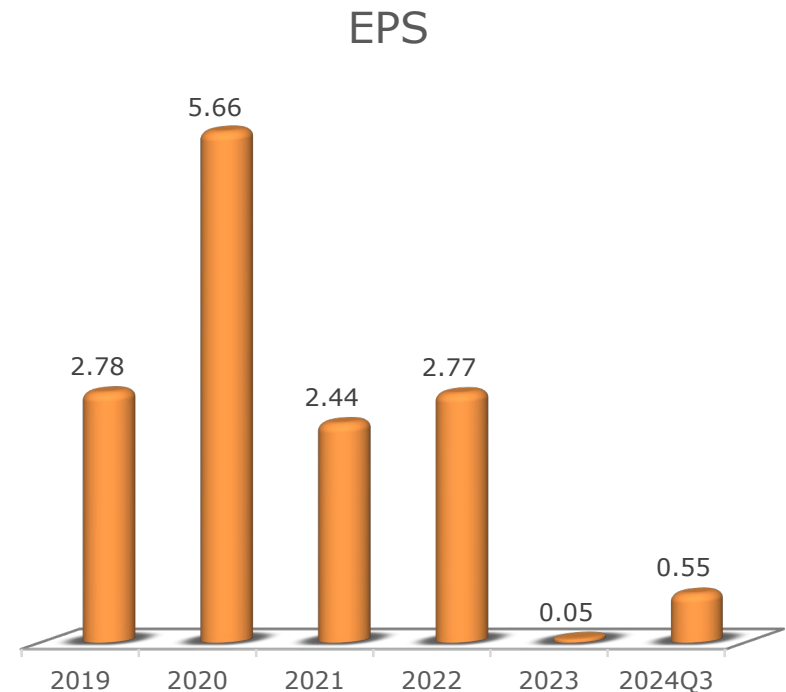
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## Performance

Gross profit% , Net operating  
Income % and Profit%



Earnings per share



Source: Financial reports audited (reviewed quarterly) by CPA for each year





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## **4. Competitiveness, strategy and future prospects**



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# Competitiveness

1. Professional R&D team with innovative and practical experience

2. Multiple key technology IP

3. Complete vertical integration with effective cost benefit

4. In house mold design capabilities and research and develop abilities



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# R&D performance- IP

Up to Oct/2024, total IP as following

Country Type	Utility	Invention	Design	Total
Taiwan	80	14	1	95
USA		9		9
Japan	1	2		3
China	52	21	1	74
Total	133	46	2	181



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## **Future prospect**

- 1. Develop hinge parts with MIM process; End goal is to approach MIM product with complex structure and challenging to form on non hinge product**
- 2. Based on hinge and develop modular IT product**
- 3. Engage with automatic production**
- 4. Enhance production and R&D coordination, utilise material usage in order to elevate product quality and value**
- 5. Continuous development on hinge product with other industrial market**



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THANK YOU

Q & A