

Gudeng Precision Industrial Co. Ltd

家登精密工業股份有限公司



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CEO

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Partner with **H.E.A.R.T.** , Grow with **P.A.S.S.I.ON.**

Safe Harbor Notice



This presentation includes forward-looking statements. Forward-looking statements refer to statement that address activities, events or developments that Gudeng Precision expects or anticipates will or may occur in the future (including but not limited to projections, targets, estimates, market share, total addressable market (TAM) and business plans).

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Summary



- Who is Gudeng?
 - a. Product portfolio-Total Solutions
 - b. Automated materials handling system
 - c. Market positioning
 - d. 2021 Events
 - e. Gudeng core business performance
 - f. Gudeng Equipment performance
- Key Growth Drivers:
 - a. Rising EUV adoption
 - b. Accelerating global chip manufacturing build-out
 - c. Expanding opportunities in China
- Strategy and Outlook

Who is Gudeng?



Product Line

Mask Carriers



Wafer Carriers

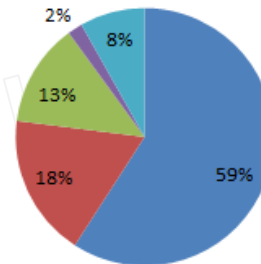


Logistic Automation Solutions (New)



2021 Revenue Mix

■ Mask \ Wafer Carriers ■ Equipment ■ Automation ■ Semiconductor Supplies ■ Others



Product Application

	Product Design	Front End	OSAT/ Back end
	IC Design / Mask maker	Foundry/ IDM	Assembly/ Wafer sorting/ Final Test
Mask Carriers	V	V	V
Automation	V	V	
Wafer Carriers		V	V

Gudeng Total Solutions

Semiconductor Mature to Advanced Process

Gudeng Key Wafer Carriers

Process : 12" FOUP

Shipping : FOSB

Packaging : 510 FOUP



Semiconductor Production Process

Product Design

Front End

Back End

Board Assembly

IC Design

Mask Maker

Foundry

Wafer Sort

Assembly

Final Test

Board Assembly

Board Testing

- Communication
- Automotive
- Consumer Electronics
- National Defense
- PC/NB

- Circuit Design
- Engineering Test

- Materials Fab
- Wafer Bank

- Wafer Bumping
- Wafer Probing

- Module, Board Assembly & Test



Tapping into new TAM – Automated Materials Handling System



Gudeng joined hand with SAA, leading logistic automation supplier, to offer a more integrated and comprehensive automation solutions for semi fabs. This opens up new TAM for Gudeng.

Storage
Mask stocker

Process
EUV mask carrier

Integrated automation solutions
Mask AMHS
(Automated Materials Handling System)

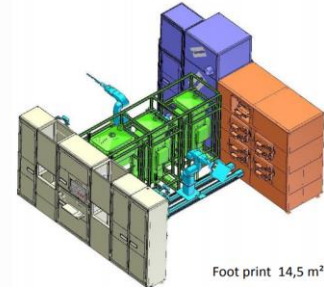


VMS-100

VMS-158



VMS-161



Foot print 14,5 m²

As is



大日商事株式会社

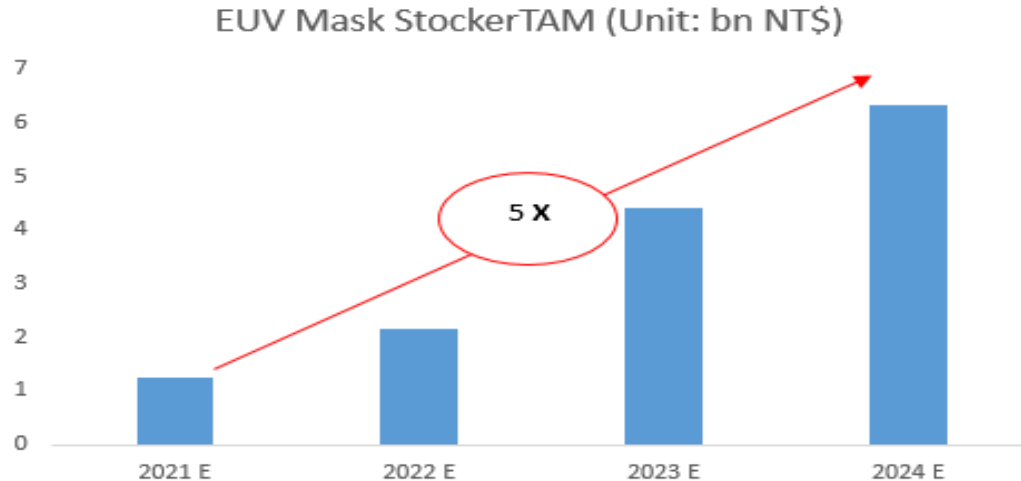


Always an Edge Ahead



The new TAM opportunity is up to NT\$6bn+ by 2024








- Gudeng's critical patents in EUV mask carrier + SAA's patented automation equipment = Dominant position in EUV stocker
- EUV stocker market is estimated to grow from NT\$1bn in 2021 to NT\$6bn+ in 2024.



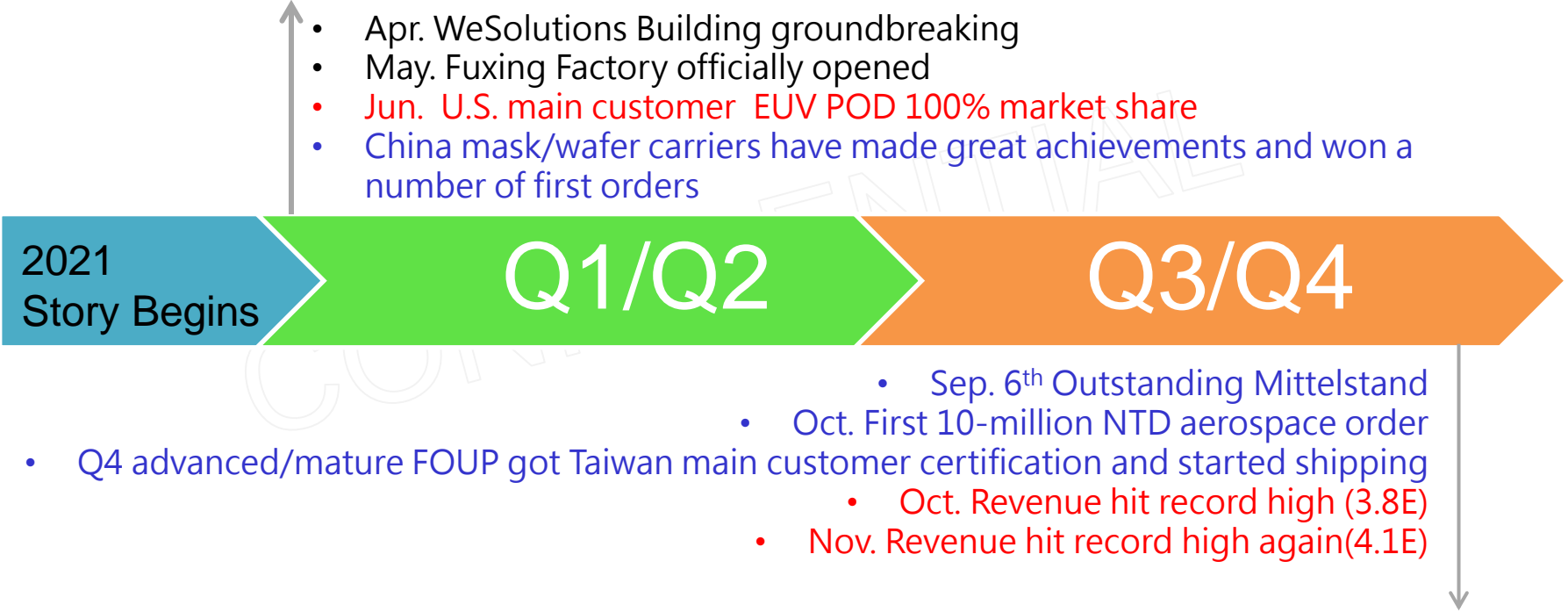
What is Gudeng's Market Position?



Competitive Landscape

Product Line	Gudeng's Current Market Share	Competitors
Mask Carriers	~70%	 <p>Gudeng settled Entegris lawsuit in 2020 with cross-licensing deal on mask carrier patents.</p>
Wafer Carriers	~30 %	   <p>Nov. 30, 2021, Gudeng filed a lawsuit against Entegris for infringing our wafer carriers patent right.</p>
Logistic Automation System	< 5%	  

2021 Events

- 
- Apr. WeSolutions Building groundbreaking
 - May. Fuxing Factory officially opened
 - Jun. U.S. main customer EUV POD 100% market share
 - China mask/wafer carriers have made great achievements and won a number of first orders

2021
Story Begins

Q1/Q2

Q3/Q4

- Q4 advanced/mature FOUP got Taiwan main customer certification and started shipping
 - Sep. 6th Outstanding Mittelstand
 - Oct. First 10-million NTD aerospace order
 - Oct. Revenue hit record high (3.8E)
 - Nov. Revenue hit record high again(4.1E)

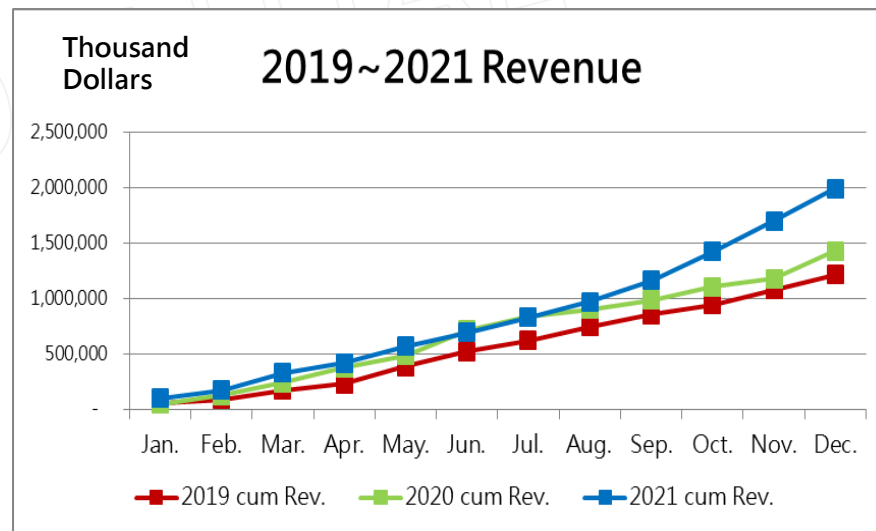
2019 ~2021 Gudeng Carriers Core Business Performance



Thousand Dollars

	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Total
2019 Monthly Rev	61,488	31,156	84,746	56,521	156,668	132,416	97,862	124,962	111,663	86,102	137,796	133,016	1,214,395
2020 Monthly Rev	49,453	80,442	114,741	135,450	109,544	225,357	123,349	67,941	82,128	118,592	70,760	252,408	1,430,165
2021 Monthly Rev	101,495	75,174	156,341	87,133	149,979	128,410	130,661	143,122	193,317	260,558	273,332	295,154	1,994,676

Thousand Dollars	2019 cum Rev.	2020 cum Rev.	2021 cum Rev.
Jan.	61,488	49,453	101,496
Feb.	92,644	129,895	176,670
Mar.	177,390	244,636	333,011
Apr.	233,911	380,086	420,144
May.	390,579	489,630	570,122
Jun.	522,995	714,987	698,532
Jul.	620,857	838,336	829,193
Aug.	745,819	906,277	972,314
Sep.	857,481	988,404	1,165,631
Oct.	943,584	1,106,996	1,426,190
Nov.	1,081,380	1,177,757	1,699,522
Dec.	1,214,395	1,430,165	1,994,676



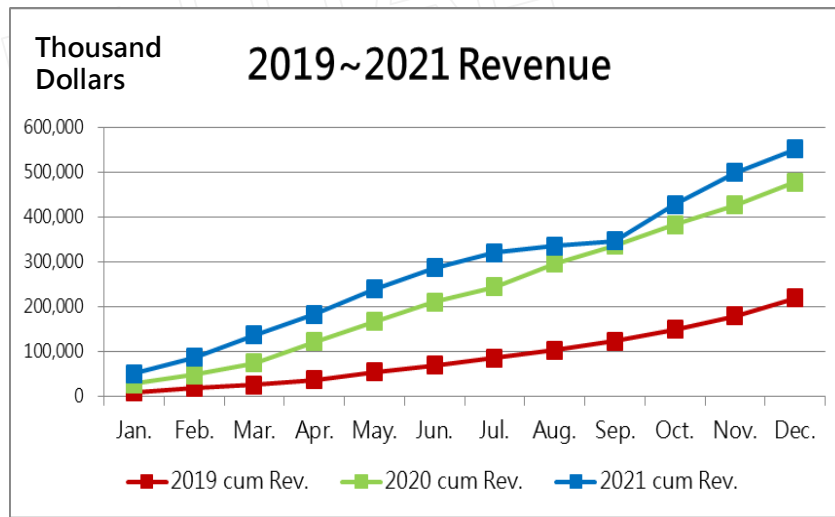
2019 ~2021 Gudeng Equipment Business Performance



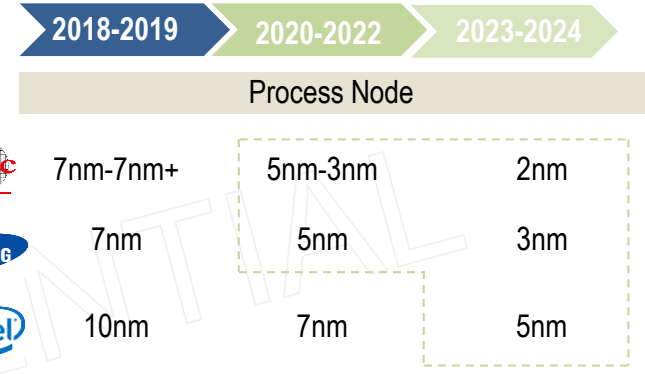
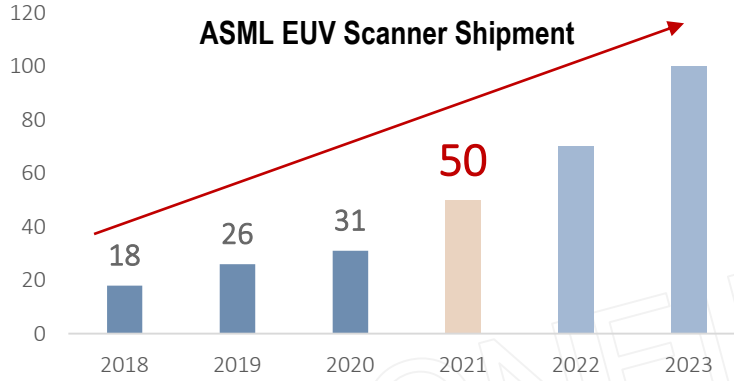
Thousand Dollars

	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Total
2019 Monthly Rev	9,446	10,727	5,901	10,738	17,654	15,282	15,612	17,570	19,883	26,157	30,194	40,126	219,290
2020 Monthly Rev	28,302	20,261	26,155	47,677	45,108	43,658	33,110	52,843	40,125	46,191	43,369	50,976	477,773
2021 Monthly Rev	51,315	35,327	50,085	46,945	56,177	46,570	33,848	15,846	10,750	81,426	70,845	52,416	551,551

GD Equipment	2019 cum Rev.	2020 cum Rev.	2021 cum Rev.
Jan.	9,446	28,302	51,315
Feb.	20,173	48,563	86,642
Mar.	26,074	74,718	136,727
Apr.	36,812	122,395	183,672
May.	54,466	167,503	239,849
Jun.	69,747	211,161	286,419
Jul.	85,360	244,271	320,268
Aug.	102,930	297,113	336,114
Sep.	122,813	337,238	346,864
Oct.	148,970	383,429	428,290
Nov.	179,164	426,798	499,135
Dec.	219,290	477,773	551,551

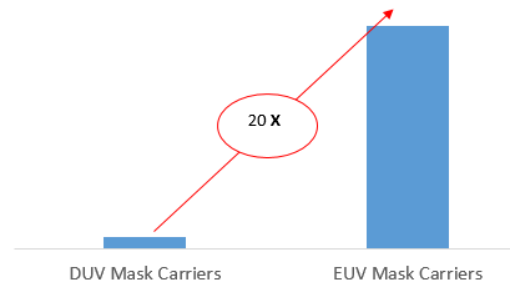


Rising EUV adoption

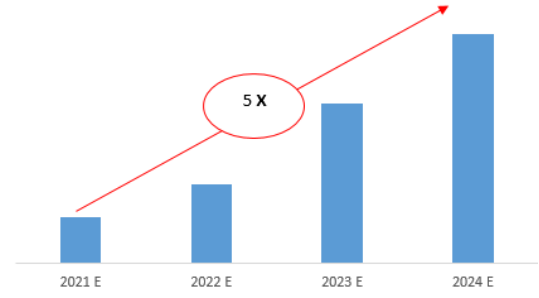


Advanced node technologies require more EUV mask carriers

Mask Carrier ASP Difference



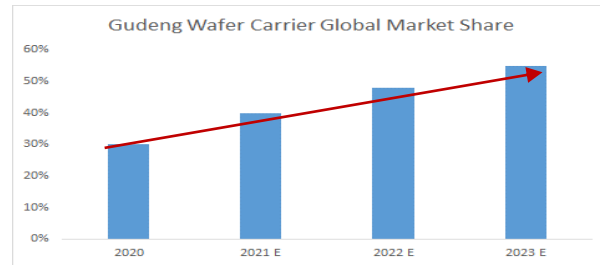
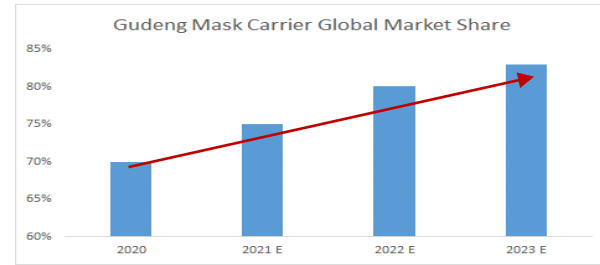
EUV Mask Carrier Demand Est.



Accelerating global chip manufacturing build-out

De-globalization drives more aggressive semi fab expansion in all regions, in contrast to only Asia past decade. This requires more mask carriers and wafer carriers.

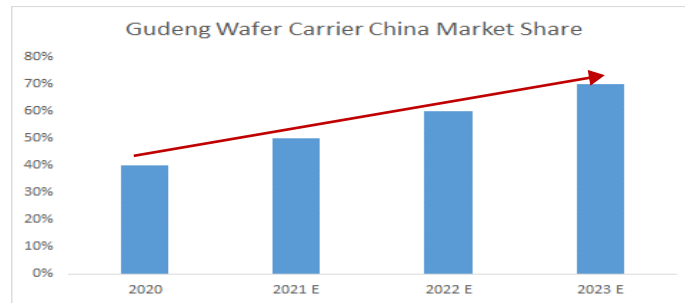
Gudeng is well-positioned for expansion and gaining market share.



Expanding opportunities in China

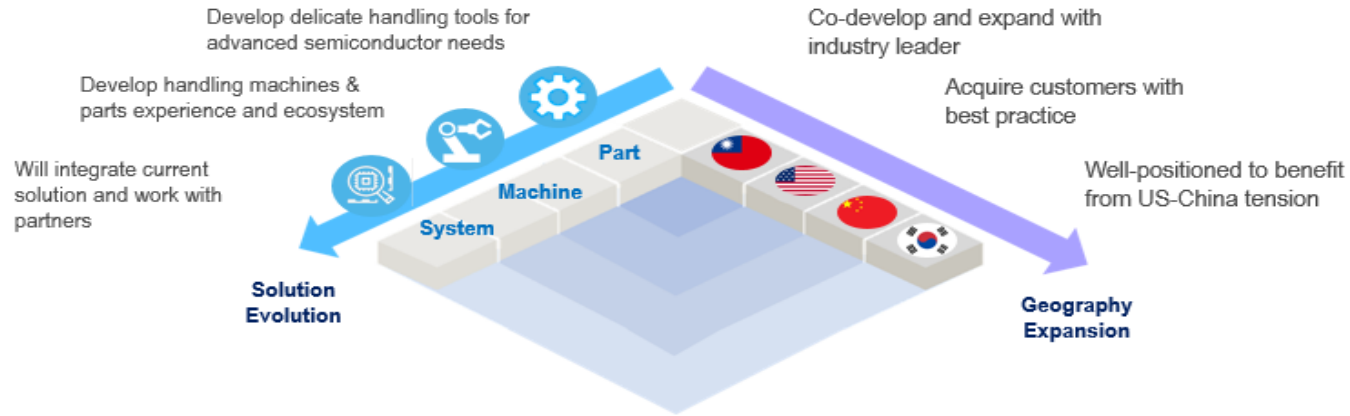
Within regions, China semi fabs expand more aggressively. China will need more mask carriers and wafer carriers.

Gudeng is preferred supplier in China under de-americanization trend.



Strategy and Outlook

- Grow with strong EUV and advanced node demand.
- Provide integrated solutions and expand with industry leader.
- Focus on wafer carriers, penetrate to other customers through successful experience with current industry leaders.





Thank You
www.gudeng.com