

#### 招商银行全资附属机构 A Wholly Owned Subsidiary Of China Merchants Bank

# Wingtech (600745 CH)

# Diversified hardware play with bright outlook

We initiate Wingtech with BUY and TP of RMB93.12. We hold an optimistic view as the Company has expanded into the semi IDM and optical imaging module market successfully in recent years, transitioning from a top ODM manufacturer. New business units can immediately boost the Company's top line (FY21: RMB13.8bn semi rev on top of RMB38.7bn ODM rev) and improve profitability as new BUs have higher NPMs (FY21 NPM: 19.1% for semi vs. 0.5% for ODM). The Company emerges as a more resilient hardware play with more diversified and lucrative businesses. Our TP of RMB93.12 is based on 25x FY23 P/E, which is 2SD lower than its historical mean (46x).

- Business in transition. Through two acquisitions, Wingtech successfully enters new markets with big TAMs and better growth outlook. The Company also reduces its reliance on smartphone ODM and moves to other diversified ODM markets (e.g. AloT, auto). Revenue growth slowed down during this period (FY21: 2% YoY). We expect a rebound with a higher growth starting from 2022 as revenue contributions from new BUs grow faster (2022-24E CAGR: Semi IDM/Optical module 41.6%/100.5% vs. ODM 26.2%).
- Outlook is bright. 1) For ODM, we believe the Company's new projects will start to contribute to revenue in 2022/23. Product mix in ODM is expected to improve (higher contribution from non-mobile: 6.7% in FY20 vs. 25.2% in FY22E) that can offset weakness in mobile market. 2) For semi IDM, this segment grew 40% YoY in FY21, showing Wingtech's capability of business integration. Riding on the localization tailwind in China with a global footprint of factories and diversified client base, we expect the semi IDM business will continue to deliver stellar results (semi IDM rev CAGR of 41.6% in 2022-2024E). 3) For optical module business, Wingtech has shipped products to tier-1 clients and passed its rigorous verification process in 2021. We expect this segment will return to profitability in 2022.
- Share price looks attractive as most bad news are priced in. Wingtech's share price has been corrected by 41.9% YTD vs CSI300 down by 9.6%. We talked to mgmt. recently and believe the Company's operation remains normal. In our view, the current share price has already factored in many uncertainties and looks attractive with forward P/E at 2SD below its historical mean.
- Upside catalysts: 1) Better-than-expected earnings result; 2) new 12-inch factory to begin production in 2H; 3) ODM's new projects to contribute in 2H. Downside risks: 1) macro challenges such as overseas inflation, slowdown in economic growth; 2) geopolitical tension that could disrupt supply chain.

#### **Earnings Summary**

(YE 31 Dec)	FY20A	FY21A	FY22E	FY23E	FY24E
Revenue (RMB mn)	51,707	52,729	65,658	90,941	116,979
YoY growth (%)	24.4%	2.0%	24.5%	38.5%	28.6%
Gross margin (%)	14.7%	16.2%	17.2%	17.2%	17.5%
Net income (RMB mn)	2,415	2,612	3,024	4,642	6,512
EPS (RMB)	2.06	2.11	2.43	3.72	5.23
YoY growth (%)	17.0%	2.4%	15.0%	53.5%	40.3%
Consensus EPS (RMB)	NA	NA	3.08	4.19	5.30
P/E (x)	36.7	35.8	31.1	20.3	14.4
Yield (%)	0.2%	0.3%	0.3%	0.5%	0.7%
ROE (%)	8.3%	7.7%	8.1%	11.5%	13.9%
Net gearing (%)	8.6%	Net cash	Net cash	13.5%	16.2%
Course Company data Bloom	share CNADIC	211			

Source: Company data, Bloomberg, CMBIGM estimates

### **BUY (Initiation)**

Target Price RMB93.12
Up/Downside +23.3%
Current Price RMB75.50

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#### Stock Data

Mkt Cap (HK\$ mn)	94,099
Avg 3 mths t/o (HK\$ mn)	1.717
52w High/Low (HK\$)	143.88/58.35
Total Issued Shares (mn)	1,246.3
Source: Bloomborg	

Shareholding Structure

Wentianxia Tech	12.35%
WX Guolian Integ Ci Inv	9.75%
ZH Ronglin Equ Inv	7.42%
Source: HKEx	

Share Performance

	Absolute	Relative
1-mth	13.3%	9.3%
3-mth	-2.1%	-4.2%
6-mth	-38.9%	-34.7%
Source: Bloomberg	7	,

#### 12-mth Price Performance



Source: Bloomberg

Auditor: Zhonghua



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# **Investment Thesis**

# **ODM** business in transition: favorable product mix to outperform as smartphone market remains weak

Wingtech has engaged in IDH/ODM business since its establishment in 2006. The Company became No.1 global ODM manufacturer since 2014, with clients including Huawei, Samsung, Xiaomi, Meizu and Lenovo.

Since 2H20, Wingtech started to shift its ODM focus from smartphone to more diversified markets, such as notebook, AloT, auto, etc. The Company's ODM market share dropped 7% HoH in 2H20. Its revenue experienced a growth decline (-7.2% in FY21 vs. 139% in FY19), which raised investors' concerns regarding the durability of its ODM operations and capability to maintain its leading market position.

We are conservatively positive on Wingtech's ODM business outlook (legacy) given new projects (non-mobile) will begin to contribute to revenue in 2022/23. Looking forward, we expect to see a favorable product mix as non-mobile projects bear higher gross margins. We believe Wingtech's transition is making progress and will drive the segment growth in the following years.

# Semi IDM business in transition: successful integration and capacity expansion amid semi shortage

Wingtech acquired Nexperia in 2019 and Newport Wafer Fab ("NWF") in 2021. Nexperia is a well-known name in discrete and MOSFET components and analog & logic ICs. Acquiring NWF, Wingtech can expand to different power semi products, such as IGBT. Currently, Wingtech has six self-owned factories, 200+ patent families, with capability of providing 800+ new products annually. Its end markets cover automotive, 5G, industrial & power, IoTs, computing and consumer electronics.

Due to the pandemic and early integration period, Wingtech's semi segment sales dipped 4% YoY in 2020. The Company delivered a strong comeback in 2021 with YoY growth of 40%. Riding on the semi shortage and localization tailwind, the semi IDM segment will be a key growth driver for Wingtech. In 2021, semi IDM business contributed 26% of total revenue, with a gross profit contribution of 60%+ and net profit contribution of 90%+, respectively. In the long term, we expect semi IDM business will continue to grow rapidly and underpin the Company's revenue growth. Meanwhile, the high-margin semi IDM business will help Wingtech to expand its margin significantly.



# Optical imaging module business in transition: expected to turn profitable in 2022; targeting broader markets (auto, AR/VR)

Wingtech acquired the optical imaging module business from OFlim in 2021 which was originally established by Sony in 2004. OFilm acquired the asset in 2016 and its clients included top smartphone manufacturers such as Apple and Samsung. According to Yole, OFilm's camera module ranked No.2 in the camera module assembly market (2019). Although the business has not generated profits after Wingtech's acquisition, the Company has already announced they have completed the verification process with top overseas clients. Related products have entered the mass production stage, which was faster than market expectations.

We expect this segment will return to profitability in 2022. Besides the existing factories, the Company's Zhuhai factory is currently under construction. The new plant has a capacity of ~4x larger than existing factory in Guangzhou Delta. The new factory is expected to begin production in 3Q22, targeting at the larger rear camera market (auto, AR/VR, etc.).

#### Outlook, valuation and risks

We believe Wingtech can enjoy synergies created from integration of three business segments (Semi IDM, optical imaging module and ODM).

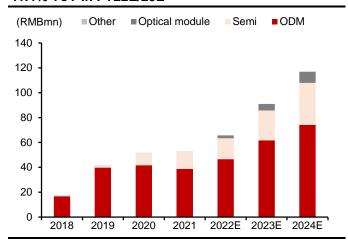
We initiate Wingtech with BUY and TP of RMB93.12. Our TP is derived by applying 25x FY23 P/E, which is 2SD lower than its historical mean (46x). We view the valuation as attractive considering 1) stellar growth opportunities from both existing and new products (e.g., IGBT) in semi segment; 2) new non-mobile ODM projects can offset weakness from smartphone ODM; 3) optical segment's return to profitability and steady growth in 2022; and 4) margin expansion as the Company enjoys favorable product mix and business integration.

Downside risks include 1) tough macro environment such as overseas inflation, slowdown in economic growth; 2) geopolitical tension that could disrupt supply chain. In addition, we suggest investors to keep an eye on the progress of reopened probe led by British government on NWF acquisition citing national security risks.



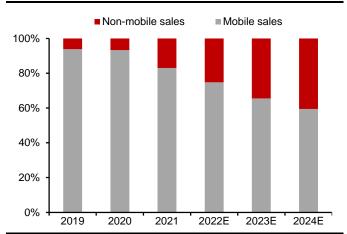
#### **Focus Charts**

Figure 1: Wingtech's revenue to grow 22.0% and 41.4% YoY in FY22E/23E



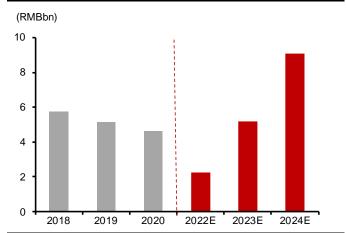
Source: Company data, CMBIGM estimates

Figure 3: Product mix in ODM is expected to improve



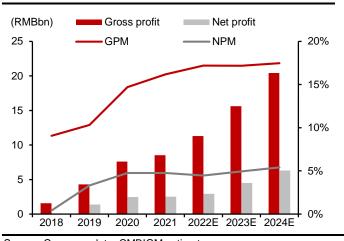
Source: Company data, CMBIGM estimates

Figure 5: Optical module business: pre-acquisition and post-acquisition revenue comparison



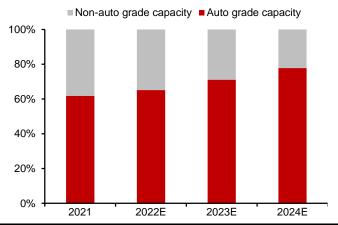
Source: Company data, CMBIGM estimates

Figure 2: Wingtech's GPM to gradually improve to 18% in 2024E



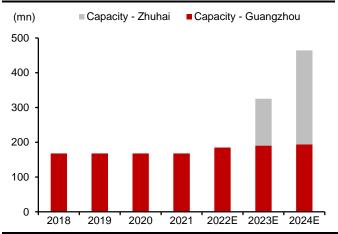
Source: Company data, CMBIGM estimates

Figure 4: Auto-related power semi capacity to increase significantly



Source: Company data, CMBIGM estimates

Figure 6: New capacity in Zhuhai to drive future growth





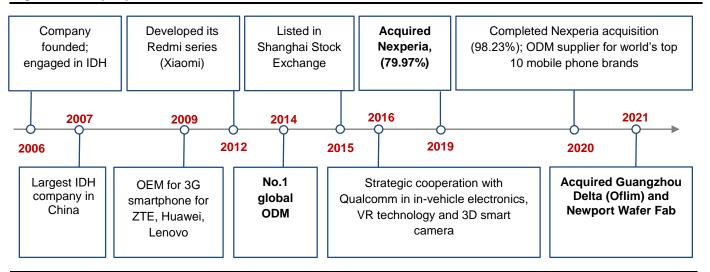
# **Company Overview**

Founded in 2006, Wingtech is principally engaged in IDH/ODM business. The Company was a No.1 global ODM manufacturer, with clients including Huawei, Samsung, Xiaomi, Meizu and Lenovo. Wingtech went public in the Shanghai Stock Exchange in 2005 (600745 CH).

In 2019, the Company expanded its business to semiconductor market by acquiring Nexperia, an expert in discrete and MOSFET components and analog & logic ICs. Nexperia was originally a division of NXP, focusing on standard products business. In 2017, NXP spun off Nexperia and then sold it to a group of Chinese investors. In 2019, Wingtech completed the acquisition of Nexperia with ~80% ownership, and increased its stake to ~98% later. In 2021, Wingtech acquired 100% ownership of Newport Wafer Fab (NWF), aiming to boost global production capacity.

In 2021, the Company also entered the optical imaging modules market through acquisition of 100% ownership in Guangzhou Delta from OFilm and certain equipment used to supply camera modules for specific overseas clients from Jiangxi Jingrun. Sony originally established Guangzhou Delta in 2004. OFilm acquired this asset in 2016 and its clients included top smartphone manufacturers such as Apple and Samsung. Before acquisition, Delta Technology was the world's leading mainstream supplier in the field of optical imaging modules and one of the core suppliers of the world's top brands. According to Yole, OFilm's camera module ranked No.2 in the camera module assembly market in 2019.

Figure 7: Company milestone



Source: Company data, CMBIGM

Through a series of acquisitions, Wingtech has built a broad portfolio including semiconductor, imaging module and ODM. Although the Company is still in business transition, we think the potential is substantial. Wingtech will soon enjoy synergies created from business integration, given similar clients base and broader end markets, including auto and AR/VR.

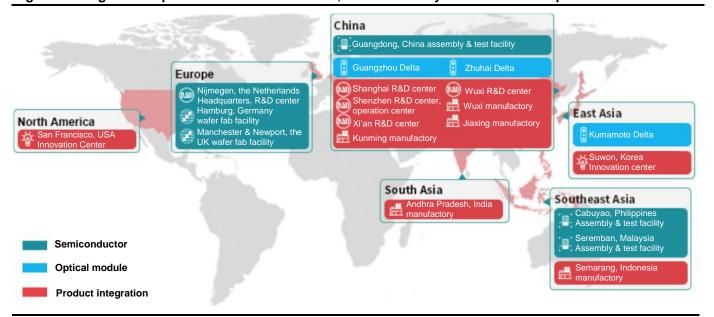


# **Semi IDM segment**

#### **Business overview**

Wingtech acquired Nexperia in 2019, getting access into the lucrative semi market. Nexperia is an expert in discrete and MOSFET components and analog & logic ICs. Headquartered in Nijmegen, The Netherlands, Nexperia owns two wafer fabs (Hamburg, Germany and Manchester, the UK) and three assembly centers (Guangdong, China, Seremban, Malaysia and Cabuyao, Philippines).

Figure 8: Wingtech/Nexperia owns three wafer fabs, three assembly centers and multiple R&D centers



Source: Company info, CMBIGM

Nexperia was originally a division of NXP, focusing on standard products business. In 2017, NXP spun off Nexperia and then sold it to a group of Chinese investors. In 2019, Wingtech acquired Nexperia from JAC Capital for ~80% of ownership, and increased its stake to ~98% later.

Nexperia offers a variety of power devices, such as transistor, diodes, ESD and MOSFET. Under IDM model, Nexperia collaborates with its own wafer fabs and back-end assembly & test facilities to manufacture products with the exception of logic devices that are outsourced.

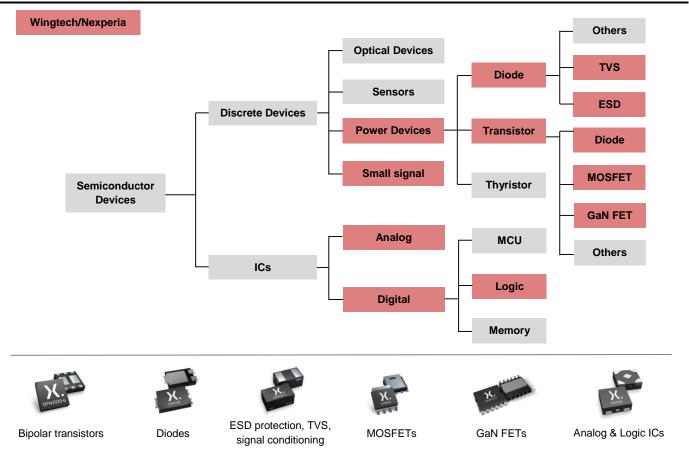
In 2021, Wingtech completed another deal of acquiring 100% ownership of Newport Wafer Fab (NWF), aiming to boost global production capacity. Following the acquisition, NWF becomes a part of Nexperia.



#### Broad semi portfolio; a leader in several sub-sectors

Currently, Wingtech owns six factories, 200+ patent families and has capability of producing 800+ new products annually. Its end markets cover automotive, 5G, industrial & power, IoTs, computing and consumer electronics. In 2021, this business segment generated RMB13.8bn in revenue.

Figure 9: Wingtech/Nexperia has a broad offering of semi products

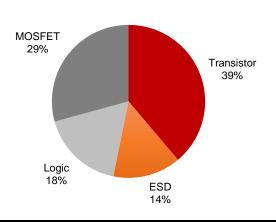


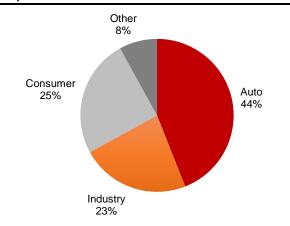
Source: Company info, CMBIGM

By products, Wingtech's semi revenue breakdown was 35% from transistor, 16% from ESD, 19% from logic device and 30% from MOSFET. By markets, we estimate the most contribution was from auto, followed by consumer and industrials. Major clients are from overseas.



Figure 10: Nexperia's revenue breakdown by Figure 11: Nexperia's auto products has ~44% share products (2021) (2021)





Source: Company data, CMBIGM estimates

Source: Company data, CMBIGM estimates

In varies sub-markets, Wingtech has maintained a dominant market share:

- 1) No.1 in small-signal diodes;
- 2) No.1 in ESD protection devices;
- 3) No.2 in PowerMOS automotive;
- 4) No.2 in Logic devices;
- 5) No.3 in small-signal MOSFETs.

Figure 12: Wingtech has maintained a dominant market share in varies sub-markets

Ranking	Bipolar Transistors and Diodes	ESD protection devices	Logic Devices	Small-Signal MOSFET devices	Automotive power MOSFET devices
1	nexperia	nexperia	TEXAS INSTRUMENTS	onsemi	infineon
2	onsemi	onsemi	ne <mark>x</mark> peria	ne <mark>x</mark> peria	ne <mark>x</mark> peria
3	ROHM	<b>47/</b>	onsemi	ROHM	onsemi

Source: Company info, HIS, CMBIGM estimates Note: Wingtech acquired Nexperia in 2019.



#### Post-acquisition: Positive growth with margin expansion

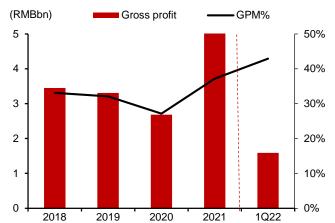
Due to the pandemic and early integration period, Wingtech's semi sales declined 4% YoY in 2020. The Company made a strong comeback in 2021 with YoY growth of 40%. , Meanwhile, Nexperia's GPM improved to 37.2% in 2021 vs. 27.7%/27.2% in 2019/20. NPM improved to 19.1% in 2021 vs. 12.2%/9.9% in 2019/20.

Figure 13: Nexperia's revenue grew ~39.5% YoY in 2021

(RMBbn) Growth % Revenue 20 50% 15 35% 10 20% 5% 5 n -10% 2018 2019 2020 2021 1Q22

2021 from 27.2% in FY20

Figure 14: Nexperia's GPM improved to 37.2% in

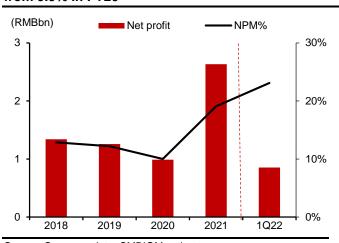


Source: Company data, CMBIGM estimates

Source: Company data, CMBIGM estimates

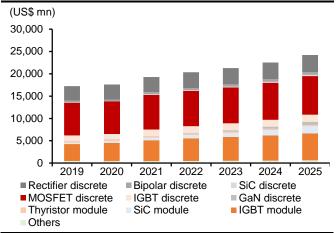
According to WSTS, global semi sales have showed rapid growth at 25.6% YoY in 2021. Power device accounted for ~4% market share. MOSFET discrete (36%), IGBT module (25%), rectifier discrete (16%) are the largest segments in power device semi market. According to Yole, power device market is expected to grow at 6.4% 2021-2026E CAGR.

Figure 15: Nexperia's NPM improved to 19.1% in 2021 from 9.9% in FY20



Source: Company data, CMBIGM estimates

Figure 16: Power device market to grow at 6.4% 2021-26E CAGR



Source: Yole, CMBIGM estimates

Riding on the semi shortage and localization tailwind, the semi segment will be a core growth driver. In 2021, semi IDM business contributed 26% of total revenue, 60% of total gross profit and 90%+ of total net profit, respectively. In the long term, we expect semi IDM business will continue to grow rapidly and underpin the Company's revenue growth. At the same time, the high-margin semi IDM business will help Wingtech to expand its margin significantly.



For semi IDM, this segment grew 40% YoY in FY21, showing Wingtech's strong capability of business integration. Within the semi segment, the revenue was mainly from power semi products. Riding on the localization tailwind in China with a global footprint of factories and diversified client base, we expect the semi IDM business will continue to deliver strong results (semi IDM rev CAGR of 38.5% in 2022-2025E).

Figure 17: Revenue breakdown for semi business (2019-2024E)

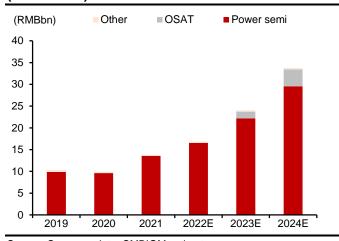
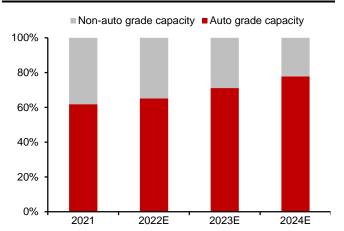


Figure 18: Auto-related power semi capacity to increase significantly



Source: Company data, CMBIGM estimates

Source: Company data, CMBIGM estimates

Meanwhile, we should also note that the auto-related power semi capacity is expected to increase significantly over the next few years. The stringent standard, longer verification time and other requirements form greater barriers for new entrants. Given abundant experience (60 years+) and broader customer base markets, we believe Wingtech will outperform its peers.

Figure 19: Selected auto clients (semi business)











Source: Company data

Figure 20: Auto-grade has stringent standard than consumer/industrial grade

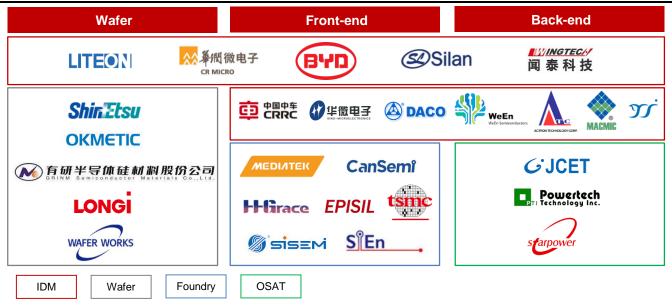
Ranking	Consumer grade	Industrial grade	Automotive grade
Temperature	0° to 85°C	-40°C to 85°C	-40°C to 150°C
Expected operating life	2-3 years	5-10 years	10 years+
Defect part per million	300 ppm	100 ppm	<10 ppm
Product qualification	JESD47	JESD47	AEC-Q100

Source: Company data, Richard Oshiro, U-blox, CMBIGM estimates



There are a few power electronics components suppliers in China. Some are IDMs, such as CR Micro, BYD, Silan, Wingtech, etc. Some are specialized in wafer, foundry and/or OSAT. We expect Wingtech's IDM model will help the Company secure sufficient production capacity.

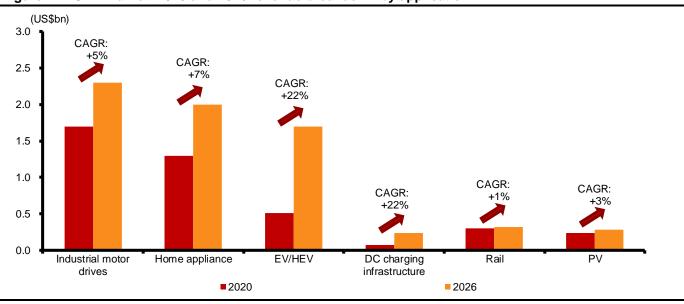
Figure 21: Power electronics components supply chain in the Greater China region



Source: Yole, Company data, CMBIGM

Driven by the demand for localization, Wingtech also aims to enter IGBT market. According to the Company, its self-designed IGBT products have been successfully taped out in March 2022 despite in the early stage. Given Wingtech's strong track record and expertise gained from acquisition of Nexperia, We believe Wingtech can successfully expand into IGBT market.

Figure 22: IGBT market: 2020 and 2026 revenue breakdown by application



Source: Yole, CMBIGM

<sup>\*</sup>Non-exhaustive list of companies.



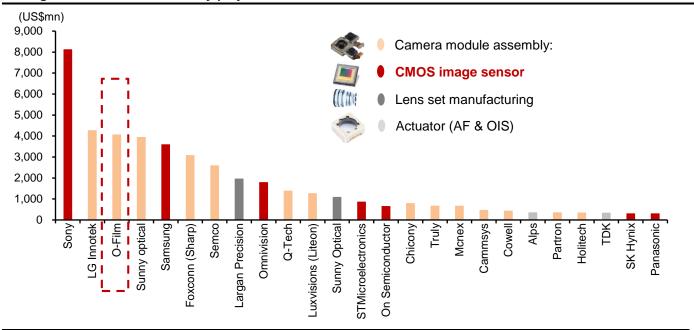
# **Optical imgaing module segment**

#### Acquired crown jewel asset from OFlim in 2021

In Jun 2021, Wingtech completed its acquisition of 100% equity of Guangzhou Delta from OFilm and certain equipment used to supply the camera modules for the specific overseas client from Jiangxi Jingrun. The total transaction was RMB3bn, which Wingtech and Gree Group contributed 70% and 30% each.

The acquired asset was originally built by Sony in 2004 and sold to OFilm in 2016. Its clients include top smartphone manufacturers such as Apple and Samsung. According to Yole, OFilm's camera module ranked No.2 in the camera module assembly market (2019).

Figure 23: CMOS camera module market (2019): O-Film (key assets acquired by Wingtech in 2021) ranked No.2 among camera module assembly players



Source: Yole, CMBIGM

The acquired Guangzhou Delta factory adopts the flip-chip technology to achieve more stable performance, stronger interference resistance, and smaller product size to meet the needs of specific customers. It is the world's leading mainstream supplier in the field of optical imaging modules and one of the core suppliers of the world's top brands. After acquisition, Wingtech has also made a factory expansion plan to support its optical imaging modules business.



#### Expected to return to profitability in 2022

In FY19/20, Guangzhou Delta's revenue was RMB5.1bn/RMB4.6bn, respectively. Although the business has not generated profit after Wingtech's acquisition, the Company has already announced they have shipped products to tier-1 client and passed its rigorous verification process in 2021.

In 2022, we expect for higher revenue. At the same time, new factory in Zhuhai is under construction with a capacity ~4x larger than the current one. The new factory is expected to begin production in 3Q22, targeting at the larger rear camera market.

We expect the optical module business to turn profitable in 2022. Prior to acquisition, the optical module business reported revenue of ~RMB4.6bn-RMB5.7bn. We believe the sales will return close to pre-acquisition level in 2023. As Zhuhai new capacity ramps up, we believe optical module business to experience fast growth in 2024 and beyond, enjoying the synergy from all three segments' integration.

Figure 24: Optical module business: pre-acquisition and post-acquisition revenue comparison

(RMBbn)

10

8

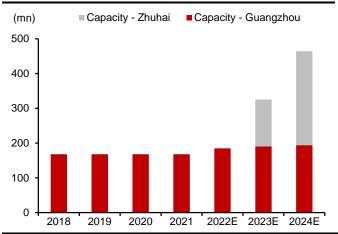
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4

2

2018 2019 2020 2022E 2023E 2024E

Figure 25: New capacity in Zhuhai to drive future growth



Source: Company data, CMBIGM estimates

Although the business has not generated profit after Wingtech's acquisition, the Company has already announced they have completed verification process with top overseas clients. Related products have entered the mass production stage, which was faster than the market expectation.

Figure 26: Recent developments

Source: Company data, CMBIGM estimates

Date	Recent deveopment
Jun 2021	Acquired 100% of equity of Guangzhou Delta from OFilm and certain equipment used to supply the camera modules for the specific overseas client from Jiangxi Jingrun
Nov 2021	Confirmed that the mass production plan with the specific overseas client, and the acquired equipment has completed testing and begun production
Dec 2021	Confirmed shipment of first batch of products to the specific client and entered the mass production stage

Source: Company data, HIS, CMBIGM



# **ODM** segment

#### A leader in IDH/ODM markets

Wingtech has engaged in IDH/ODM business since its establishment. The Company was a No.1 global ODM manufacturer since 2014, with clients like Huawei, Samsung, Xiaomi, Meizu and Lenovo.

Key players in the OEM/ODM/IDH/EMS are listed in the table below. With labor specialization, OEMs can outsource their design/manufacturing needs to IDH/ODM/EMS. IDH specializes in design and EMS specializes in manufacturing, while ODM specializes in both.

Figure 27: OEM vs. ODM vs. IDH vs. EMS vs. In-house

	Definition	Companies
OEM	Original equipment manufacturer: The ultimate brand owner.	Samsung, Huawei, Apple, OPPO, vivo, Xiaomi, Lenovo, Dell, HP, Microsoft, etc.
ODM	Original design manufacturing: ODM develops, designs and manufactures for OEMs.	Huaqin, <b>Wingtech</b> , Longcheer, Tinno, CNCE, Compal, Quanta, etc.
IDH	Independent Design House: IDH only develops and designs products for OEMs and does not provide manufacturing services.	Wingtech, Longcheer, Huaqin, etc.
EMS	Electronic Manufacturing Service: EMS provides raw material procurement, product assembly, logistics and distribution services for OEMs and does not provide design services.	Foxconn, Inventec, Flex, BYDE etc.
In-house	Hardware brand manufacturers design or produce their own products and do not work with ODM, IDH or EMS companies.	

Source: Counterpoint, CMBIGM

The reason behind the emergence of IDH/ODM/EMS is that OEMs can focus on advancing technology development, marketing, brand upgrade and after-sales services. Design, procurement and manufacturing businesses are outsourced to specialized personals. In this way, OEMs can improve the operating efficiency, optimize procurement costs, enhance supply chain management, etc.

Figure 28: Different design operations among OEMs and ODM/IDH/EMS: ODMs provide full service offerings

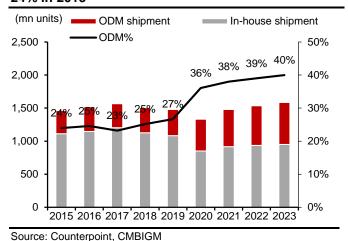
Design operations	Product definition	Industrial design	IC design	Software/ hardware design	Material & components procurement	Supply chain & logistics mgmt.	Pilot production & testing	Mass production
ODM	√	√	√	√	√	√	√	√
IDH	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$				
EMS					$\checkmark$	$\checkmark$	√	$\checkmark$

Source: Counterpoint, CMBIGM



According to Counterpoint, top ODMs are Huaqin, Wingtech, Longcheer, TINNO and CNCE. For Wingtech, key current clients include Samsung, OPPO/realme/Oneplus, Xiaomi, LG, Lenovo/Moto, HMD.

Figure 29: ODMs' share increased to 38% in 2021 vs. Figure 30: Key clients of top ODMs 24% in 2015



Huaqin

Samsung, OPPO/realme/Oneplus, Huawei/Honor, Xiaomi, LG, Lenovo/Moto

Wingtech

Samsung, OPPO/realme/Oneplus, Xiaomi, LG, Lenovo/Moto, HMD

Longcheer

Xiaomi, Huawei/Honor, LG, Moto/Lenovo, HMD, OPPO/realme

TINNO

Moto/Lenovo, HMD, LG, Wiko, overseas telecom, overseas local brand

CNCE

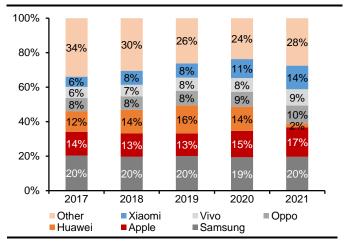
Huawei/Honor, HMD, Lenovo/Moto, overseas telecom

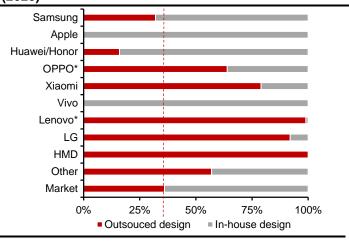
Source: Counterpoint, CMBIGM

\*Note: 2020 market share includes smartphone, laptop and tablet.

Wingtech's ODMs' smartphone clients include most of the leading OEMs, except for Apple. Top OEMs such as Xiaomi/OPPO/Samsung/Huawei & Honor outsourced 79%/64%/32%/16% of their total smartphones in 2020.

Figure 31: OEMs share change (2017-2021) Figure 32: Different operation strategy among OEMs (2020)





Source: Counterpoint, CMBIGM estimates

Note: For Huawei, data of HONOR is included in all quarters except

for 2021 which reflected the separation of the two brands.

Source: Counterpoint, CMBIGM



## Legacy business in transition given weakness in smartphone ODM market

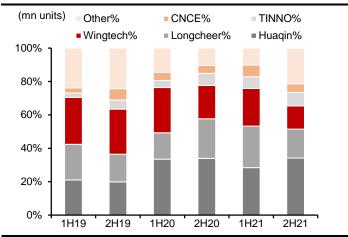
In 2H20, Wingtech decided to shift its ODM focus from smartphone to more diversified markets, such as notebook, AloT, auto, etc. Now, there are five business units under ODM, including smartphone, IoT, laptop, smart hardware and others.

During the transition period, the revenue of this legacy business saw a decline (-7.2% in FY21 vs. 139% in FY19), which raised investors' concerns regarding the durability of Wingtech's ODM operations and capability to maintain its leading market position.

segment transition

(mn units) TINNO Other CNCE Wingtech Longcheer ■ Huaqin 300.0 250.0 200.0 150.0 100.0 50.0 0.0 1H19 2H19 2H20 1H21 2H21

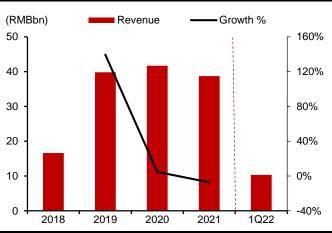
Figure 33: Wingtech's shipment declined due to Figure 34: Wingtech's market share shrank to No. 3 from No.1



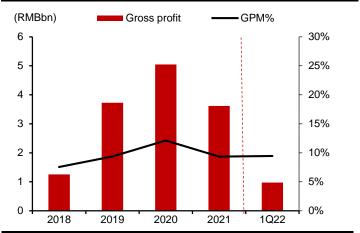
Source: Counterpoint, CMBIGM

Source: Counterpoint, CMBIGM

Figure 35: ODM's revenue growth declined as Figure 36: ODM's GPM declined as business is in business is in transition



transition

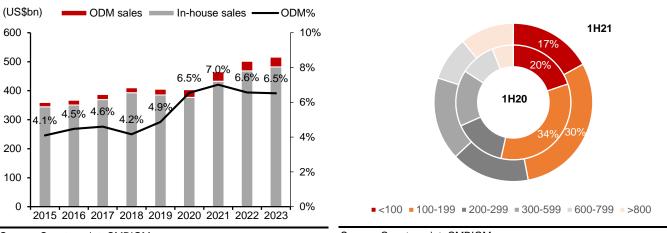


Source: Company data, CMBIGM estimates



However, we view the transition as a smart and necessary move. Although smartphone ODMs' share in term of shipment was 37% in 2021, its share measured by dollar amount was only 7% in 2021. The reason is that OEMs outsource most of their lowend models, which is usually below ASP of US\$200. This price band accounted for 47% (1H21). Considering the low ASP and limited margin for low-end models, there is not much room for smartphone ODMs to enhance profitability.

Figure 37: Smartphone ODMs' share was relatively Figure 38: ODM focus segments showed share small in term of sales, only representing 7% in 2021 decrease in smartphone market (1H21 vs. 1H20)



Source: Counterpoint, CMBIGM

Source: Counterpoint, CMBIGM

In addition, global smartphone shipment remained stable in the past years before the pandemic. Although there are fluctuations due to the COVID outbreak, we think the smartphone shipment will remain ~1.4bn in the following years. Although the share of outsourced design may increase, the ODM for smartphone market remains a very competitive one. Therefore, we think this business is not attractive as before for Wingtech's smartphone ODM business to grow.



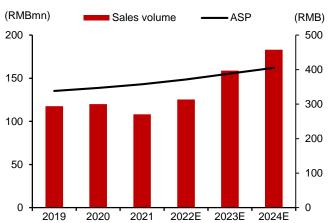
# Legacy business to embrace new opportunities: growth potential from smartwearables, AloT products and auto

For ODM, we expect revenue contribution from non-mobile market will increase. Wingtech has shifted its focus from smartphone to a more diversified and lucrative market. We believe new projects will start to contribute to revenue in 2022/23. Product mix in ODM is expected to improve (higher contribution from non-mobile: 6.7% in FY20 vs. 25.2% in FY22E) that can offset weakness in mobile market.

Figure 39: Product mix in ODM is expected to improve

■ Non-mobile sales ■ Mobile sales 100% 80% 60% 40% 20% 0% 2019 2020 2021 2022F 2023E 2024E

Figure 40: ODM business to grow with expansion in capacity and ASP

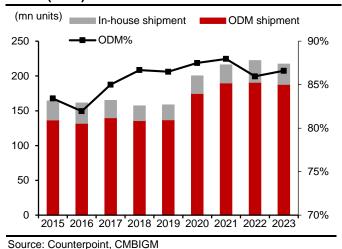


Source: Company data, CMBIGM estimates

Source: Company data, CMBIGM estimates

We believe Wingtech's expansion into non-smartphone market will be smooth. Smartphone ODMs gained experience in designing/manufacturing highly integrated devices in small size, which helps them to expand their ODM business into laptop and tablet. Wingtech currently accounted for 1%/29% market share in laptop/tablet ODM market.

Figure 41: Laptop ODMs accounted for 88% market Figure 42: Key competitors in laptop ODM market share (2021)



Source: Counterpoint, CMBIGM

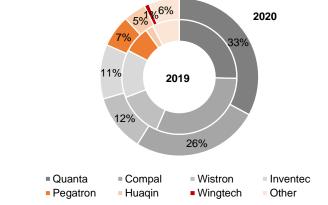
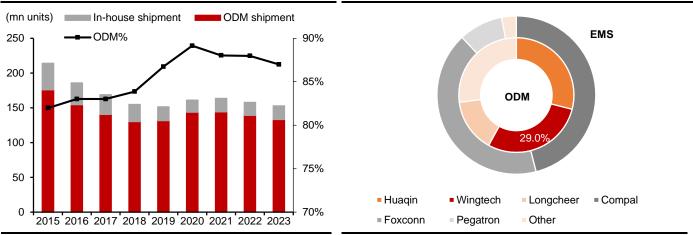




Figure 43: Tablet ODMs accounted for 88% market Figure 44: Key competitors in Tablet ODM market share (2021)



Source: Counterpoint, CMBIGM

Source: Counterpoint, CMBIGM

Besides traditional smartphone, laptop and tablet market, Wingtech also targets in penetrating into the smart wearables (including smartwatch, TWS, smart audio device, etc.), AloT and auto markets, for their growth potential and higher profitability.



Looking forward, we are conservatively positive on Wingtech's ODM business outlook given new projects (non-mobile) will start to contribute to revenue in 2022/23. The segment's product mix is expected to improve significantly. This looks promising given the smartphone market outlook is grim due to inflation and weakening consumption power. We believe Wingtech's transition is proactive and will drive the segment growth in the following years. We expect Wingtech's ODM business to outperform its peers.

Figure 45: Recent developments

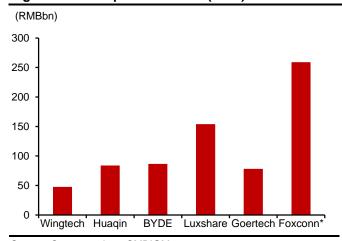
Date	Recent deveopment
Dec 2021	According to Digitimes, Wingtech regained 40 million units of Samsung's 2022 handset manufacturing orders
Mar 2021	Wingtech's product integration business has carried out a number of business cooperation with specific overseas customers, such as computers and smart homes, and has achieved regular shipments of smart home projects.
Jun 2022	Wingtech confirmed that its current project to support the leading intelligent vehicle brands in the field of intelligent cockpit is progressing well and will be in mass production soon. The company's product integration business in automotive electronics aims to become a pre-installed vehicle-grade solution provider for smart cars and smart mobility in the automotive electronics industry, providing customers with a complete set of solutions from software to hardware then to manufacturing. The company has established cooperative relationships with many OEMs, tier1 chip suppliers and other upstream and downstream companies along the ecological chain, and is actively expanding its automotive electronics business.

Source: Company data, Digitimes, CMBIGM

We think Wingtech's ODM business will soon enjoy integration synergies. There are potential upside for the ODM business if Wingtech penetrates into high-margin laptop/tablet business of overseas clients and shares gains from other emerging smart devices and auto-related business.

In addition, with its leading semi portfolio and capacity expansion, Wingtech can better manage its supply chain, lower material costs and secure order/production. We expect optical/semi businesses to provide new opportunities for its legacy ODM business.

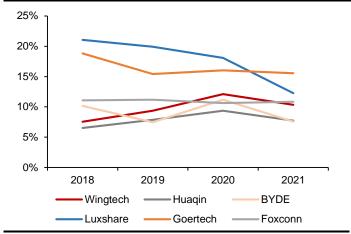
Figure 46: ODM peers revenue (2021)



Source: Company data, CMBIGM
\*Note: Foxconn only includes telecom/mobile segment, excluding

cloud and industrial revenue/gross profit.

Figure 47: ODM peers GPM



Source: Company data, CMBIGM



#### **Financials**

### 1Q22 financials suggest recovery; FY22/23E rev to grow 22%/41% YoY

In 2021, Wingtech's revenue was RMB52.7bn, growing at 2.0% YoY (vs. 24.4% in FY20). The slowdown in revenue growth was mainly due to business transition. In 1Q22, Wingtech's revenue grew 23.4% YoY, suggesting a good recovery. We expect full year sales growth will recover to 22.0% in 2022 and rebound to higher growth rates starting from 2023, owing to rising revenue contributions from new BUs and non-mobile ODM.

Figure 48: Wingtech's 1Q22 revenue, suggesting a good recovery in business

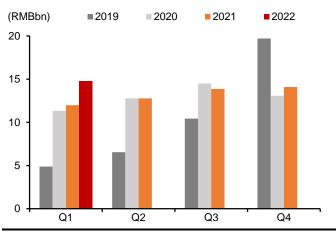
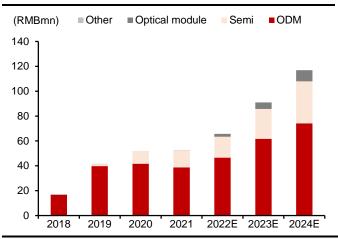


Figure 49: Wingtech's revenue to grow 22.0% and 41.4% YoY in FY22E/23E



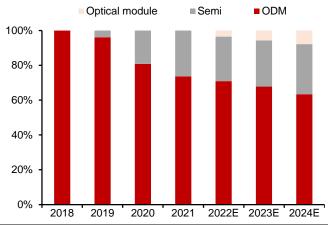
Source: Company data, CMBIGM estimates

Source: Company data, CMBIGM estimates

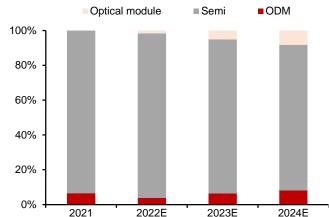
The acquired new BUs will not only drive sales, but will also improve profitability. In 2021, 74% of revenue was from lower margin ODM business (GPM: 9.4%), but 93% of net profit was from higher margin semi business (GPM: 37.2%).

acquiring new BUs

Figure 50: Wingtech's revenue mix is improving after Figure 51: Wingtech's gross profit was mainly from semi due to higher GPM



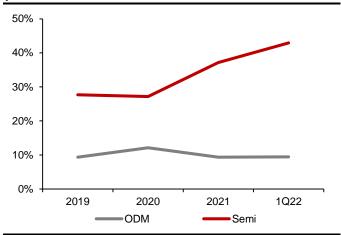
Source: Company data, CMBIGM estimates





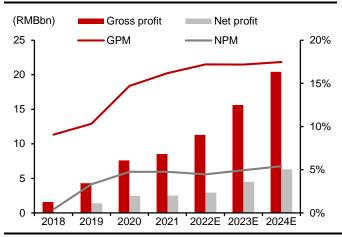
In 2021, GPMs of ODM and Semi IDM came in at 9.4% and 37.2%, respectively. Optical module was still operating at a loss (recently acquired in 1H21). In 1Q22, GPM of semi IDM segment grew to 42.9% due to strong demand. Overall GPM was 17.7% in 1Q22, 1.6%/2.2% higher than FY21/1Q21. We expect optical module will return to profitability in 2022 and see improvement in margin as capacity gradually ramps up.

Figure 52: Wingtech's semi IDM business is more profitable than ODM business



Source: Company data, CMBIGM estimates

Figure 53: Wingtech's GPM to gradually improve to 18% in 2024E





### **Assumptions**

We expect Wingtech's overall revenue to grow 22% and 41% YoY in FY22/23E. Its GPM is expected to grow mildly in the following years, given the GPM of ODM, Optical and OSAT businesses is lower than power semi.

Figure 54: Revenue breakdown by applications

RMBmn	FY19	FY20	FY21	FY22E	FY23E	FY24E
ODM	39,786	41,667	38,685	46,576	61,704	74,160
YoY	139%	5%	-7%	20%	32%	20%
Optical	-	-	-	2,260	5,200	9,087
YoY	na	na	na	na	130%	75%
Semi	1,590	9,892	13,803	16,822	24,038	33,732
YoY	na	522%	40%	22%	43%	40%
Other	202	148	241	-	=	-
YoY	-72%	-27%	63%	-100%	na	na
Total	41,578	51,707	52,729	65,658	90,941	116,979
Үо Ү	140%	24%	2%	25%	39%	29%
Gross margin						
ODM	9.4%	12.1%	9.4%	10.4%	10.9%	11.1%
Optical	na	na	na	5.3%	9.3%	11.3%
Semi	27.7%	27.2%	37.2%	37.8%	35.1%	33.2%
Total	10.3%	14.7%	16.2%	17.2%	17.2%	17.5%

Source: Company data, CMBIGM estimates

Figure 55: Operating financials

RMBmn	FY19	FY20	FY21	FY22E	FY23E	FY24E
Revenue	41,578	51,707	52,729	65,658	90,941	116,979
YoY	139.8%	24.4%	2.0%	24.5%	38.5%	28.6%
Cost of sales	37,286	44,105	44,200	54,366	75,317	96,546
Gross profit	4,292	7,602	8,528	11,291	15,625	20,433
YoY	173.2%	77.1%	12.2%	32.4%	38.4%	30.8%
GPM (%)	10.3%	14.7%	16.2%	17.2%	17.2%	17.5%
SG&A	1,099	2,104	2,786	3,268	4,393	5,385
% of rev	2.6%	4.1%	5.3%	5.0%	4.8%	4.6%
R&D	1,320	2,221	2,689	3,447	4,774	6,141
% of rev	3.2%	4.3%	5.1%	5.2%	5.2%	5.2%
Operating profit	1,537	2,678	2,948	3,931	5,635	7,919
YoY	2122.3%	74.3%	10.1%	33.3%	43.4%	40.5%
OPM (%)	3.7%	5.2%	5.6%	6.0%	6.2%	6.8%
Net profit to shareholders	1,254	2,415	2,612	3,024	4,642	6,512
YoY	1954.4%	92.7%	8.1%	15.8%	53.5%	40.3%
NPM (%)	3.0%	4.7%	5.0%	4.6%	5.1%	5.6%



Figure 56: Quarterly operating model (1Q21-1Q22)

RMBmn	1Q21	2Q21	3Q21	4Q21	1Q22	YoY%	QoQ%
Revenue	11,991	12,778	13,877	14,083	14,803	23.4%	5.1%
YoY	6%	0%	-4%	0%	23%		
Cost of sales	10,126	10,634	11,511	11,929	12,176		
Gross profit	1,865	2,144	2,366	2,154	2,627	40.9%	22.0%
YoY	-7%	-1%	-1%	109%	41%		
GPM (%)	16%	17%	17%	15%	18%		
SG&A	568	667	756	794	716		
% of rev	5%	5%	5%	6%	5%		
R&D	506	625	736	822	799		
% of rev	4%	5%	5%	6%	5%		
Operating profit	772	679	840	657	697	-9.6%	6.1%
YoY	-10.0%	-45.7%	18.0%	-561.6%	-9.6%		
OPM (%)	6%	5%	6%	5%	5%		
Net profit to shareholders	652	581	809	570	503	-22.9%	-11.8%
YoY	2.6%	-45.5%	45.1%	264.8%	-22.9%		
NPM (%)	5.4%	4.5%	5.8%	4.0%	3.4%		
Seasonality (% of FY number)	25%	22%	31%	22%	19%		

Source: Company data, CMBIGM estimates

Figure 57: CMBIGM estimates vs consensus

	CMBIGM				Consensus		Diff (%)			
RMBmn	FY22E	FY23E	FY24E	FY22E	FY23E	FY24E	FY22E	FY23E	FY24E	
Revenue	65,658	90,941	116,979	69,201	88,750	107,555	-5%	2%	9%	
Gross profit	11,291	15,625	20,433	11,505	14,766	18,082	-2%	6%	13%	
Operating profit	3,931	5,635	7,919	4,351	5,994	7,511	-10%	-6%	5%	
Net profit	3,024	4,642	6,512	3,788	5,185	6,546	-20%	-10%	-1%	
EPS (RMB)	2.43	3.72	5.23	3.08	4.19	5.30	-21%	-11%	-1%	
Gross margin	17.2%	17.2%	17.5%	16.6%	16.6%	16.8%	0.6 ppt	0.5 ppt	0.7 ppt	
Operating margin	6.0%	6.2%	6.8%	6.3%	6.8%	7.0%	-0.3 ppt	-0.6 ppt	-0.2 ppt	
Net margin	4.6%	5.1%	5.6%	5.5%	5.8%	6.1%	-0.9 ppt	-0.7 ppt	-0.5 ppt	



### **Valuation**

We initiate Wingtech with BUY and TP of RMB93.12. Our TP is derived by applying 25x FY23 P/E, which is 2SD lower than its historical mean (46x). We see the valuation is attractive considering 1) stellar growth opportunities from both existing and new products (e.g. IGBT) in semi segment; 2) new non-mobile ODM projects can offset weakness from smartphone ODM; 3) optical segment's return to profitability and steady growth in 2022; and 4) margin expansion as the Company enjoys favorable product mix and business integration.

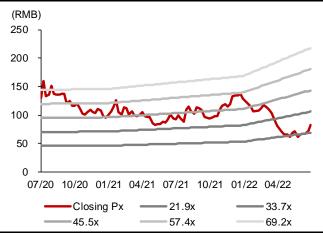
Wingtech's share price has been corrected by ~40% YTD vs CSI300 down by 9.22%. We talked to mgmt. recently and got confirmation that the Company's operation remains normal. In our view, the current share price has already factored in many uncertainties and looks attractive as it is trading at 2SD below its historical mean.

Downside risks: 1) macro challenges such as overseas inflation, slowdown in economic growth; 2) geopolitical tension that could disrupt supply chain; and 3) negative results from the new probe led by British gov. on NWF acquisition.

Figure 58: 12M forward P/E chart

Source: Company data, CMBIGM

Figure 59: 12M forward P/E band



Source: Company data, CMBIGM

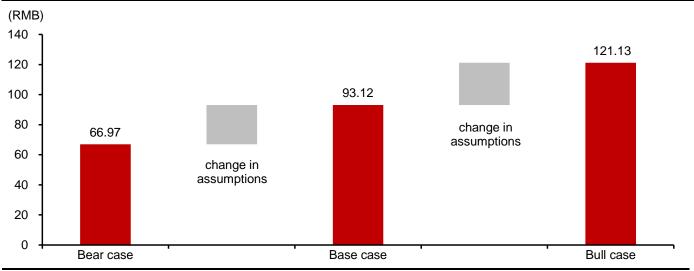


#### **Bull/bear case analysis**

We expect Wingtech TP will rise to RMB121.13 based on our bull case scenario (60.4% upside), while falling to RMB66.97 based on our bear case scenario (11.3% downside).

Key changes in assumptions include 1) semi IDM capacity ramp-up progress, 2) non-mobile ODM shipment %, 3) ASP trend, and 4) GPM/NPM.

Figure 60: Bull/bear cases analysis



Source: CMBIGM estimates

Note: adjustments in assumptions include changes in ASP, capacity, margin, etc.



Figure 61: Peers' valuation

		Price	Mkt. Cap	P/E (x	)	ROE (%	6)
Company	Ticker	(LC)	(US\$ mn)	FY22E	FY23E	FY22E	FY23E
ODM peers							
Wingtech	600745 CH	77.51	14,440	31.1	20.3	8.1	11.5
BYDE	285 HK	24.25	6,964	20.7	13.9	8.9	11.9
Luxshare	002475 CH	31.32	33,172	22.4	16.9	22.1	23.0
Goertek	002241 CH	32.69	16,694	19.6	15.4	17.9	19.1
Foxconn	2354 TT	46.40	2,205	10.0	9.1	5.8	6.5
			Average	20.8	15.1	12.5	14.4
Semi peers							
Wingtech	600745 CH	77.51	14,440	31.1	20.3	8.1	11.5
Infineon	IFNNY US	23.38	30,532	12.7	12.2	17.6	16.5
On Semi	ON US	46.84	20,352	9.6	9.6	38.9	28.0
STMicro	STM US	30.40	27,681	9.2	8.9	29.1	23.5
Silan Micro	600460 CH	49.29	10,434	47.1	35.3	18.9	20.2
CR Micro	688396 CH	55.80	11,011	29.1	25.7	13.0	12.8
Yangjie	300373 CH	66.31	5,079	30.0	24.3	18.6	19.0
			Average	24.1	19.5	20.6	18.8
Optical module pee	ers						
Wingtech	600745 CH	77.51	14,440	31.1	20.3	8.1	11.5
Sunny Optical	2382 HK	116.00	16,215	21.0	17.0	21.8	22.6
Q Tech	1478 HK	5.18	782	6.8	5.1	14.8	16.8
Ofilm	002456 CH	6.33	3,083	-	-	(8.6)	(4.3)
			Average	19.6	14.1	9.0	11.6

Source: Bloomberg, CMBIGM

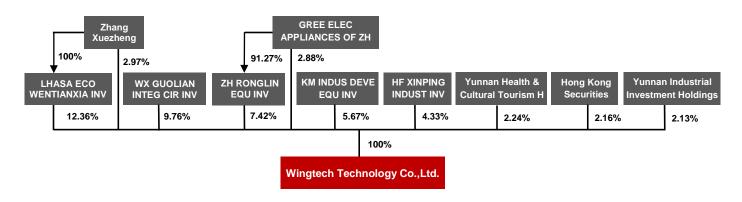


# **Financial Summary**

Income statement						Cash flow summary					
YE 31 Dec (RMB mn)	FY20A	FY21A	FY22E	FY23E	FY24E	YE 31 Dec (RMB mn)	FY20A	FY21A	FY22E	FY23E	FY24E
Revenue	51,707	52,729	65,658	90,941	116,979	Net profit	2,460	2,513	2,932	4,500	6,313
Cost of sales (	(44,105)	(44,200)	(54,366)	(75,317)	(96,546)	Depreciation/amortization	944	934	1,390	1,371	1,135
Gross profit	7,602	8,528	11,291	15,625	20,433	Change in working capital	1,036	(3,720)	(1,756)	(3,732)	(1,076)
						Others	2,175	2,022	2,108	2,556	4,310
Selling exp	(816)	(760)	(876)	(1,262)	(1,592)	Net cash from operating	6,614	1,749	4,674	4,695	10,682
Admin exp	(1,288)	(2,026)	(2,392)	(3,131)	(3,793)						
R&D exp	(2,221)	(2,689)	(3,447)	(4,774)	(6,141)	Capex	(2,222)	(5,092)	(8,537)	(10,897)	(13,033)
Finance costs	(852)	(382)	(801)	(1,210)	(1,561)	Other	(992)	(853)	2,568	2,862	2,467
Other operating exp.	10,101	11,437	14,877	20,366	25,601	Net cash from investing	(3,214)	(5,945)	(5,970)	(8,035)	(10,566)
Operating profit	2,678	2,948	3,931	5,635	7,919						
						Share issuance	6,200	1,036	446	343	261
Other non-oper exp.	(27)	24	5	24	20	Dividend paid	(695)	(480)	(1,312)	(1,723)	(2,268)
Pre-tax profit	2,652	2,972	3,936	5,659	7,939	Other	(7,505)	7,355	6,396	4,922	6,827
						Net cash from financing	(2,001)	7,910	5,531	3,543	4,821
Income tax expense	(192)	(460)	(1,004)	(1,159)	(1,626)	_					
Minority interests	44	(99)	(92)	(142)	(199)	Net change in cash	1,399	3,715	4,235	203	4,937
Net profit to shareholders	2,415	2,612	3,024	4,642	6,512	Cash at beginning of the year	6,437	7,659	11,250	15,484	15,687
	,	,	,	,- –	,	Exchange difference	(178)	(123)	0	0	0
						Cash at the end of the year	7,659	11,250	15,484	15,687	20,623
Balance sheet						Key ratios					
YE 31 Dec (RMB mn)	FY20A			FY23E		YE 31 Dec	FY20A	FY21A	FY22E	FY23E	FY24E
Current assets	24,929		,		•	Revenue mix		00 005	40.570	04.704	74.400
Cash & equivalents	5,751	10,505	15,484	15,687	•	ODM	41,667	38,685	46,576	61,704	74,160
Account receivables	6,417	9,298	10,490	14,426	15,060	Camera	0	0	2,260	5,200	9,087
Inventory	6,134	6,299	7,107	9,401	9,643	Semi	9,892	13,803	16,822	24,038	33,732
Prepayment	454	284	428	615	777	Other	148	241	0	0	0
Other current assets	6,172	4,060	3,664	2,597	2,655						
						Growth (%)					
Non-current assets	34,962	,	46,167		-	Revenue	24.4%	2.0%	24.5%	38.5%	28.6%
PPE	5,460	8,138	3,834	-2,047	-9,981	Gross profit	77.1%	12.2%	32.4%	38.4%	30.8%
Deferred tax assets	664	1,027	1,252	0	0	Operating profit	74.3%	10.1%	33.3%	43.4%	40.5%
Other non-current assets	28,837		41,080		66,387	Net profit	92.7%	8.1%	15.8%	53.5%	40.3%
Total assets	59,891	72,576	83,339	91,902	105,163						
						Profit & loss ratio (%)					
Current liabilities	21,478	23,727	29,515	,	41,810	Gross margin	14.7%	16.2%	17.2%	17.2%	17.5%
ST borrowings	450	3,537				Operating margin	5.2%	5.6%	6.0%	6.2%	6.8%
Account payables						Net profit margin	4.7%	5.0%	4.6%	5.1%	5.6%
Tax payable	569	411	666	0	0						
Other current liabilities	8,558	8,391	8,909	4,593	4,973	Balance sheet ratio					
						Net debt/total equity (%)		Net cash	Net cash	13.5%	16.2%
Non-current liabilities	-	-	-			Current ratio (x)	1.2	1.3	1.3	1.2	1.2
LT borrowings	7,805	4,218	5,344	7,397	8,936	Receivable turnover days	72	54	55	50	46
Deferred tax liability	485	1,119	1,271	0	0	Inventory turnover days	(49)	(51)	(45)	(40)	(36)
Other non-current liabilities	1,049	8,995	9,267	7,274	7,274	Payable turnover days	(115)	(96)	(75)	(70)	(67)
Total liabilities	30,816	38,060	45,397	51,007	58,020						
						Profitability (%)					
	1,245	1,246	1,246	1,246	1,246	ROE	8.3%	7.7%	8.1%	11.5%	13.9%
Share capital	1,243				05 744	DOA	4.0%	2 60/	0.00/	E 40/	6.2%
Share capital Reserve	24,325	-	25,271	25,538	25,741	ROA	4.070	3.6%	3.6%	5.1%	0.270
				25,538 12,635	,	ROA	4.076	3.0%	3.6%	5.1%	0.270
Reserve	24,325	24,924		,	18,216	Per share data (RMB)	4.070	3.0%	3.6%	5.1%	0.270
Reserve Retained earnings	24,325 3,931	24,924 6,082	8,630	12,635	18,216	Per share data (RMB)	2.06	2.11	2.43	3.72	
Reserve Retained earnings Other	24,325 3,931 (441) 15	24,924 6,082 1,446 817	8,630 2,071 725	12,635 893 583	18,216 1,556	Per share data (RMB) EPS					5.23 0.51



# Appendix 1 – Shareholding structure



Source: Company data, Bloomberg and CMBIS.



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