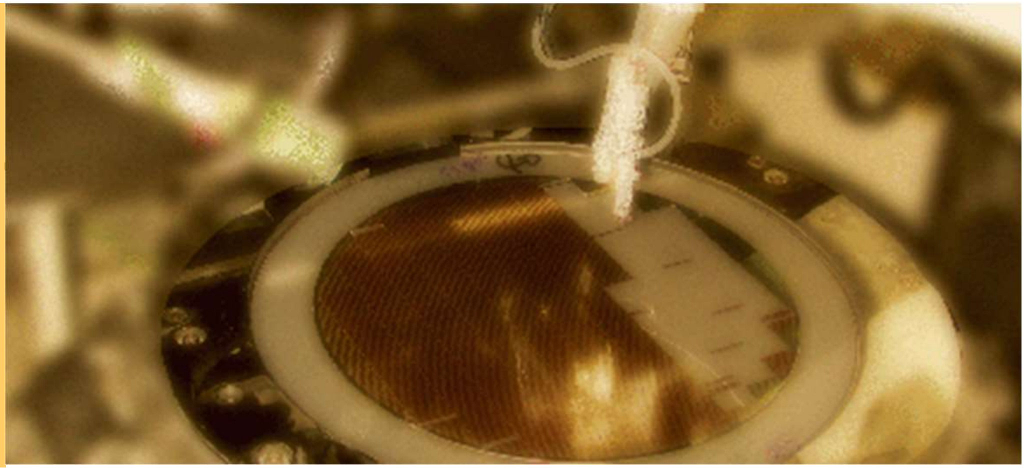
Benchmark of
The Testing Industry



King Yuan Electronic Co., Ltd.
京元電子股份有限公司

[TWSE: 2449]

November, 2024

- Wafer Test Service
- Assembly Service
- Burn-In Service
- IC Test Service
- Backend Support
- Turnkey Operation

Safe Harbor Notice

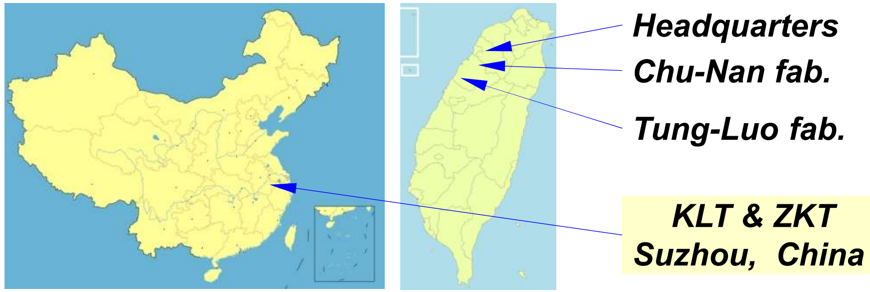
- Forward-looking statements involve known and unknown risks, uncertainties and other factors, which may cause the actual performance, financial condition or results of operations of the Company to be materially different from any future performance, financial condition or results of operations implied by such forward - looking statements. Further information regarding these risks, uncertainties and other factors is included in the Company most recent Annual Report on Taiwan Stock Exchange (Market Observation Post System).

KYEC group snapshot

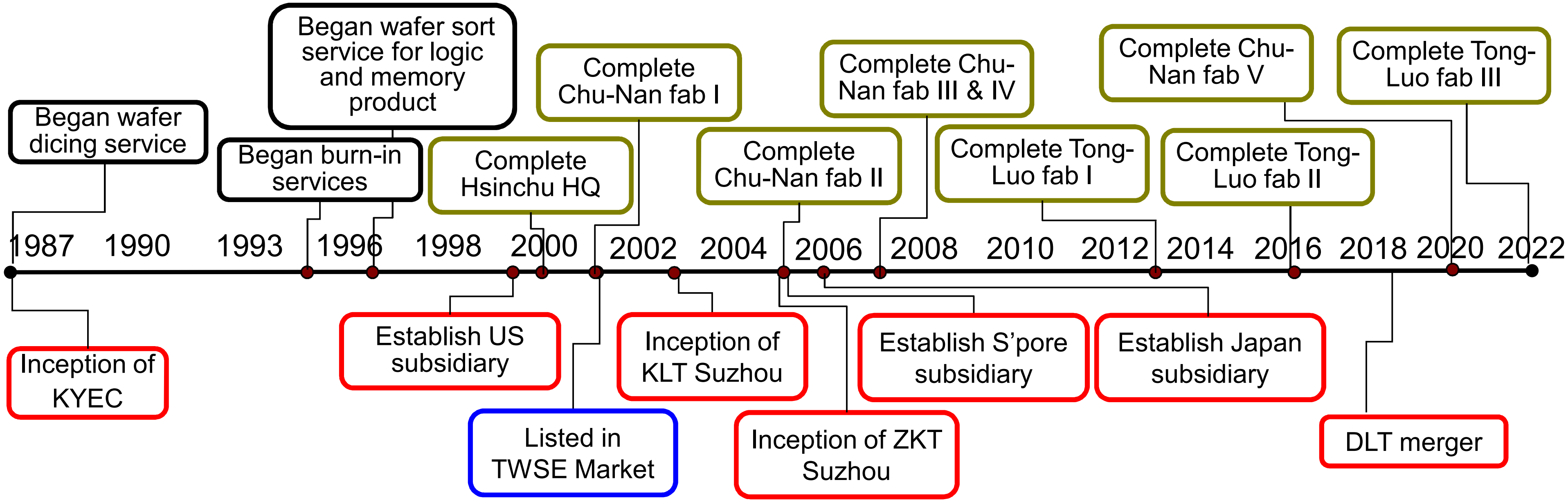
Overview

- **Established In:** **May 1987**
- **Headquarters:** **Hsinchu, Taiwan**
- **TWSE Listed:** **2449.TW**
- **Market Cap.(1):** **NT$137,559 million**
- **Employees:** **10,490**

Manufacturing footprint in Taiwan & China



Key milestones



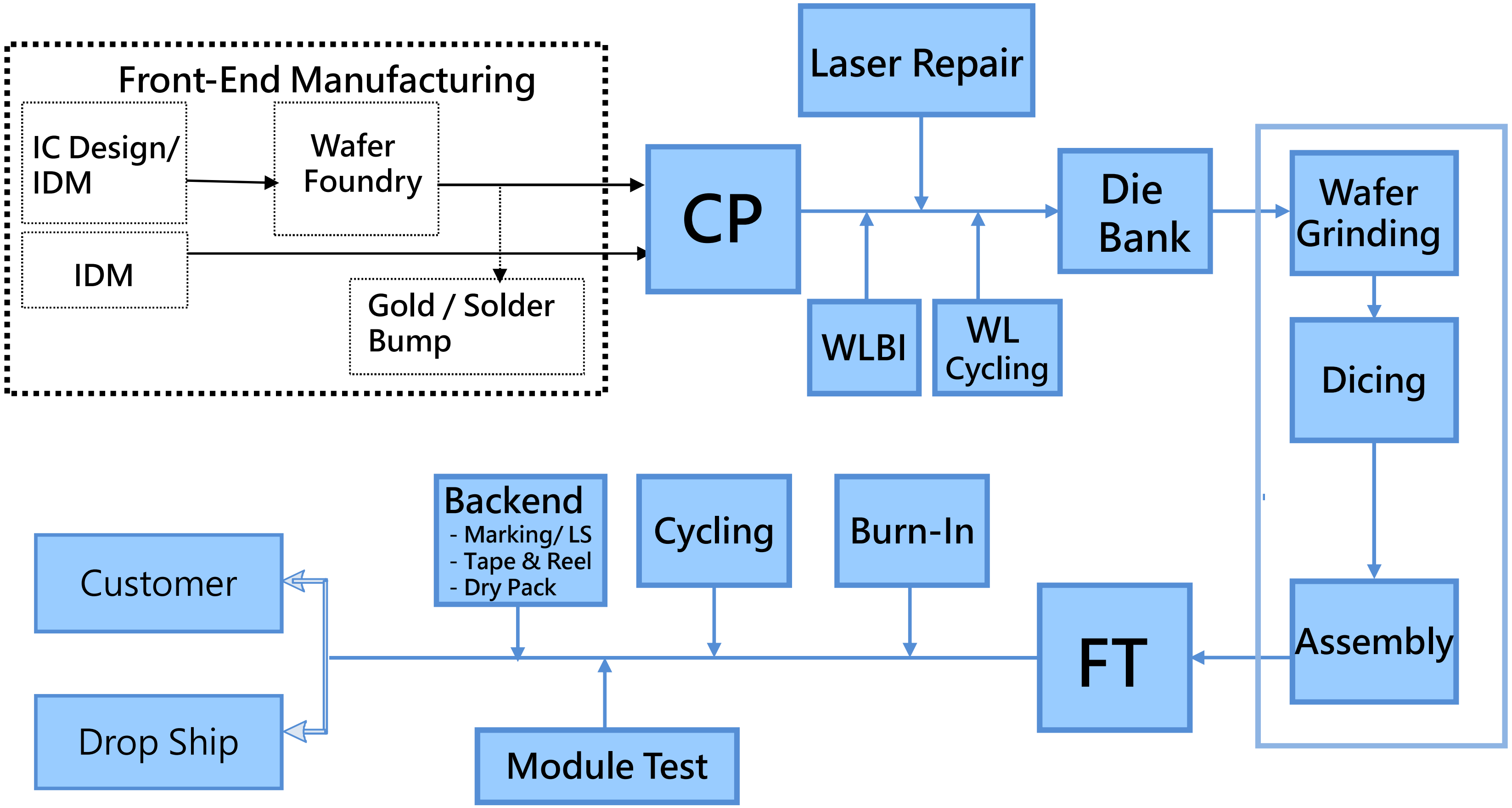
Note: (1) As of September 30, 2024

KYEC is the benchmark of semi testing industry

KYEC is uniquely positioned, locally and globally, as a pure-play testing house and aiming to take advantages of the ever-growing outsourced semi testing business.

1. **4,900+ sets of installed test system, including both commercial and in-house developed testers, providing testing services for various end applications**
2. **Optimal customer structure and balanced business exposure to maintain strong margin growth during the volatile semiconductor market environment**
3. **In-house test system developing and manufacturing capability as a core competence differentiate KYEC from its OSAT peers**
4. **Seasoned management team with broad and deep industry experiences**
5. **Healthy financial structure and strong EBITDA profit to support CapEx**
6. **Corporate strategies dedicated to enhance shareholder's interests**

IC manufacturing process and KYEC available services



Note: Blue colors are KYEC available services

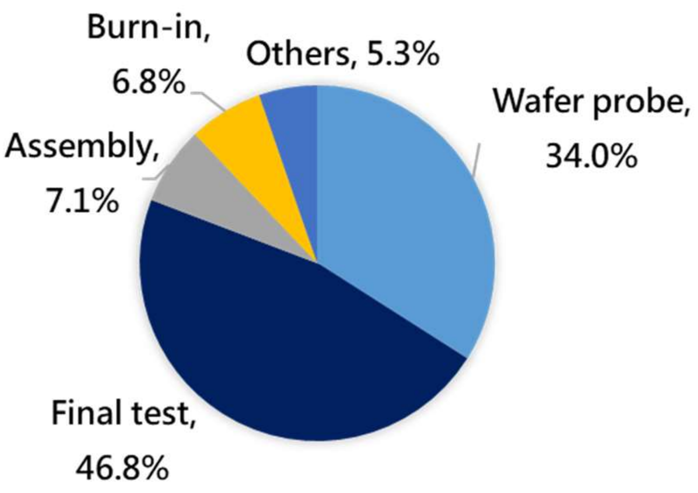
Diversified product mix for stable, long-term growth

- In general, test services contributed about 85% of company's total revenue.
- Devices tested by KYEC have been widely used in various applications, including consumer, communication, automotive, data computing and industrial … etc.
- Revenue recorded in Others included sale of equipment and tooling, lease income, and miscellaneous items.

Revenue breakdown for Q3'24

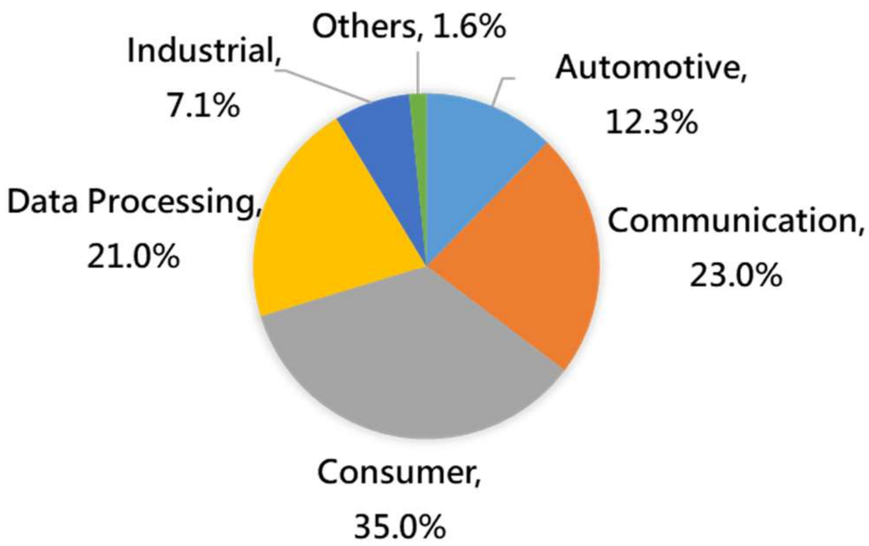
By Manufacturing Process

Exclude data of subsidiary in China



By Application

Exclude data of subsidiary in China



KYEC services global top tier customers

50% of global top 50 semi companies use KYEC's test services

(US$ Millions)

2023	Company	2022	2023	Change
1	Intel*	58,436	49,117	(15.9%)
2	Samsung Electronics	63,823	40,942	(35.9%)
3	Qualcomm	34,840	29,225	(16.1%)
4	Broadcom*	23,868	25,613	7.3%
5	NVIDIA*	15,331	25,053	63.4%
6	SK hynix	33,387	23,027	(31.0%)
7	AMD*	23,620	22,307	(5.6%)
8	Apple	18,108	18,052	(0.3%)
9	Infineon Technologies*	15,400	17,022	10.5%
10	STMicroelectronics*	15,842	16,941	6.9%
11	Texas Instruments	18,844	16,483	(12.5%)
12	Micron Technology	26,849	16,123	(39.9%)
13	MediaTek*	18,043	13,451	(25.5%)
14	NXP	12,954	13,076	0.9%
15	Analog Devices*	12,391	11,813	(4.7%)
16	Renesas Electronics*	11,372	10,436	(8.2%)
17	Sony*	9,259	10,195	10.1%
18	Microchip Technology*	7,774	8,335	7.2%
19	Onsemi*	7,997	7,927	(0.9%)
20	KIOXIA	10,006	5,842	(41.6%)
21	Marvell*	5,831	5,450	(6.5%)
22	Western Digital	7,598	5,269	(30.7%)
23	Skyworks Solutions*	4,435	3,882	(12.5%)
24	Novatek*	3,724	3,515	(5.6%)
25	Realtek*	3,762	3,047	(19.0%)

2023	Company	2022	2023	Change
26	Robert Bosch*	2,926	2,962	1.2%
27	Rohm	3,099	2,833	(8.6%)
28	Toshiba*	2,836	2,661	(6.2%)
29	Qorvo	3,020	2,518	(16.6%)
30	OMNIVISION*	2,356	2,436	3.4%
31	ams OSRAM	2,976	2,332	(21.6%)
32	HiSilicon	1,265	2,214	75.0%
33	Yangtze Memory	2,090	2,180	4.3%
34	Nexperia	2,270	2,096	(7.7%)
35	Mobileye*	514	1,848	259.5%
36	DENSO	1,655	1,847	11.6%
37	UniSoC Technologies	2,080	1,833	(11.9%)
38	Cirrus Logic*	2,015	1,790	(11.2%)
39	Monolithic Power Systems	1,758	1,783	1.4%
40	Vishay	1,820	1,711	(6.0%)
41	Socionext	1,276	1,590	24.6%
42	Mitsubishi Electric	1,507	1,491	(1.1%)
43	LX Semicon	1,635	1,448	(11.4%)
44	Nichia	1,597	1,435	(10.1%)
45	Diodes*	1,661	1,369	(17.6%)
46	Sanechips Technology	1,373	1,368	(0.4%)
47	Fuji Electric*	1,168	1,321	13.1%
48	Winbond Electronics*	1,751	1,219	(30.4%)
49	Hangzhou Silan Microelectronics	1,080	1,179	9.2%
50	TDK*	1,171	1,165	(0.5%)

Note: company's names in blue * are KYEC's customers. AMD includes Xilinx. **Source: Gartner 2024**

KYEC retains flexible and cost effective test solutions

- Current semi testing service provider is demanding on flexibility, cost effective and various platform/capacity for servicing the small-volume business trend.
- KYEC is standing to take advantage of this market trend for its flexible in test platform choices, capacity and in-house capability.
- KYEC currently installed 4,900+ test systems on its shop floor.

	Memory	Logic / Mixed-Signal	CIS/CCD	LCD Driver	RF / Wireless	SOC
Advantest	T5571P / T5581H / T5585 / T5588 T5371 / T5372 / T5377S T5382A / T5771 T5335 / T5365 / T5334 / T5335P	T6672 / T6673 T6575 / T6577 T6683		T6331 T6371 T6372 T6373	T2000-RF	T2000
Agilent (Verigy)	V1200 / V2000 V3000 / V4400	HP93K / HP94K / HP83K	HP93KIP / 94KIP		HP93KPSRF	HP93KPS / PS1600 HP93K-EXA
LTX-Credence	Kalos / XW Kalos II / HEX Pkalos / Pkalos II	Duo / Quartet SCX12 / ITS9KEXA / CV ITS3KEXA / ASL1K / ASL3K-MS Sapphire / D10			ASL3K-RF Fusion-CX Fusion-MX	Sapphire / D10 Fusion-MX DiamondX
Teradyne	M1 / M2	Catalyst / J750 J750EX / iFlex Ultra Flex	IP750 IP750EMP		Flex-RF Catalyst-RF Ultra Flex-RF	J750EX / J750 / J750HD / ETS-364 iFlex / Ultra Flex Catalyst / M1 / M2
Yokogawa				TS6700 ST6730		
KYEC	M-series tester	E-series tester	I-series tester	D-series tester	E-series tester	E-series tester

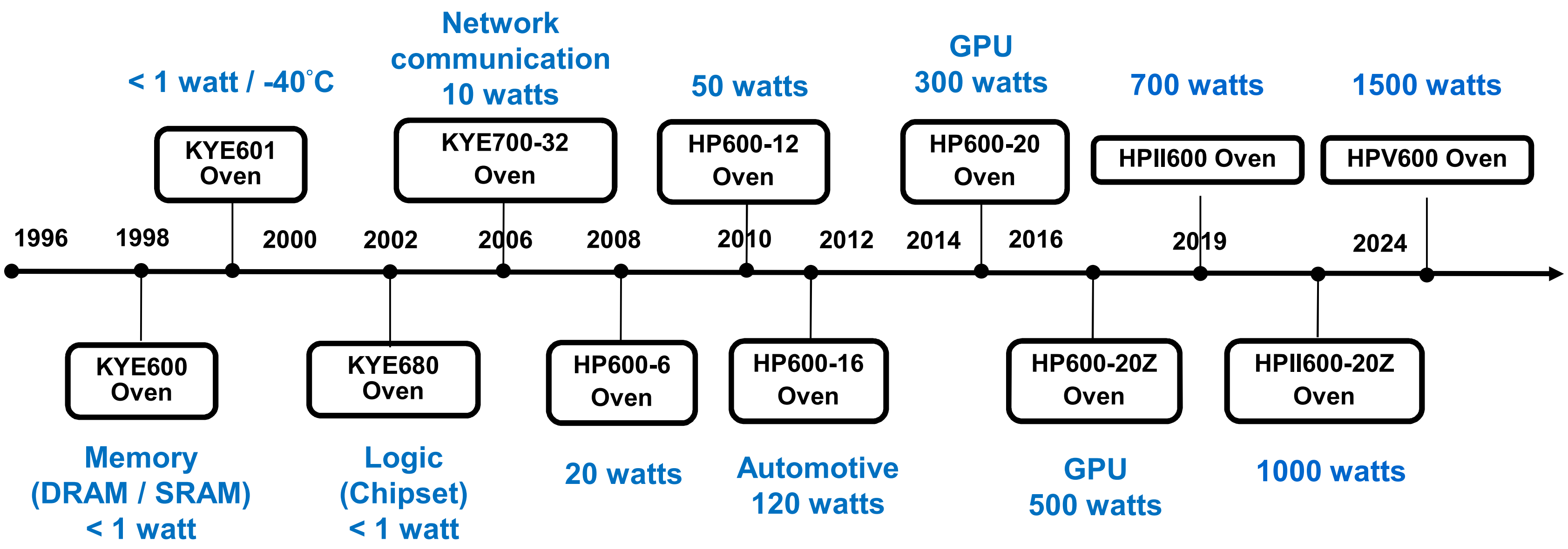
In-house test systems widely use in mass production

- In general, in-house test system provide a custom-tailored solution flexible in test configuration and programming for device used in various applications.
- In addition, KYEC designs and manufactures test tooling and probe card in-house.

Application of in-house tester

KYEC developed ovens for burn-in test services

- In-house burn-in ovens provide flexibility, custom tailored test services.
- Our burn-in oven is able to offer testing under wide range of power/watts for products after one single test setup.
- Our high-power burn-in oven employs the air-cooling technologies instead of the water-cooling used in the market available ovens, providing advantages of cost saving and easy maintenance.



KYEC provides turnkey WLCSP services as well

KYEC's WLCSP process flow

- Wafer incoming inspection
- ↓ Wafer Test
- ↓ Wafer grinding
- ↓ Laser mark
- ↓ Die saw (Laser grooving)
- ↓ AOI
- ↓ T & R Waffle pack
- ↓ Ship

- **In addition to wafer testing, KYEC provides wafer grinding, die sawing/laser grooving, AOI and packing services for Wafer Level Chip Scale Package (WLCSP) as well.**
- **WLCSP is primarily for applications as: e-compass, accelerometer, gyroscope, pressure, humidity, microphone, power management and memory products.**
- **WLCSP revenue in KYEC has increased significantly over last couple years. We expects this trend to continue in the future.**



KYEC group management team with deep industry experience

C.K. LEE - Chairman & CEO

- Over 30 Years of semiconductor industry experience
- Former Manager of Manufacturing, United Microelectronics Corporation
- Bachelor of Department of Shipping &Transportation Management, National Taiwan Ocean University.

Gauss CHANG - General Manager

- Over 30 Years of semiconductor industry experience
- Former Manager of foundry business, Winbond Electronics Corp.
- MBA. from Saginaw Valley State University, Michigan, USA.

Hans HAN- Vice President

- Over 30 Years of semiconductor industry experience
- Former deputy assistant vice president of Walton Advanced Engineering Inc.
- Bachelor of Department of Electrical Engineering, National Taiwan University of Science and Technology. M.Sc. from Department of Electronic and Computer Engineering, National Taiwan University of Science and Technology.

Andy LIANG - Senior VP

- Over 20 Years of semiconductor industry experience
- Former manager of equipment engineering, UTAC/Taiwan
- Bachelor of Department of Electronic Engineering, Minghsin University of Science and Technology. MBA from Minghsin University of Science and Technology.

Steven CHANG - Senior VP

- Over 20 Years of semiconductor industry experience
- Former Manager of quality assurance, Macronix International Co., LTD.
- Bachelor of Department of Electrical Engineering, Chung Yuan Christian University. M.Sc. from Graduate School of Electrical Engineering, National Central University.

Logan CHAO - VP & CFO

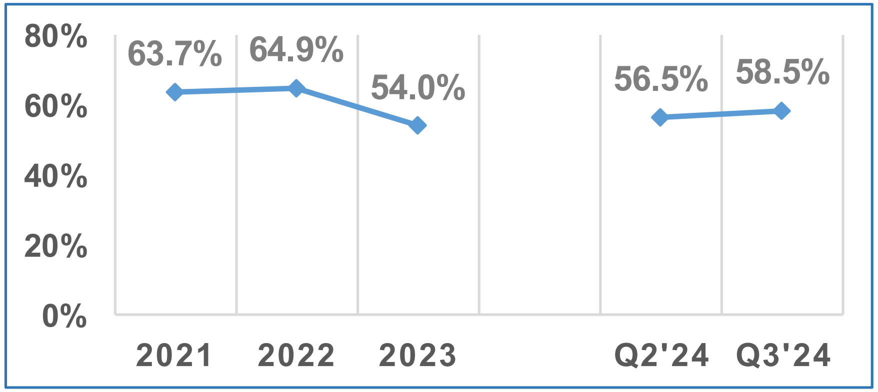
- Over 20 Years of semiconductor industry experience
- Former Audit manager of KPMG
- Bachelor of Department of Accounting, Chinese Culture University. EMBA of National Tsing Hua University.

Financial highlights

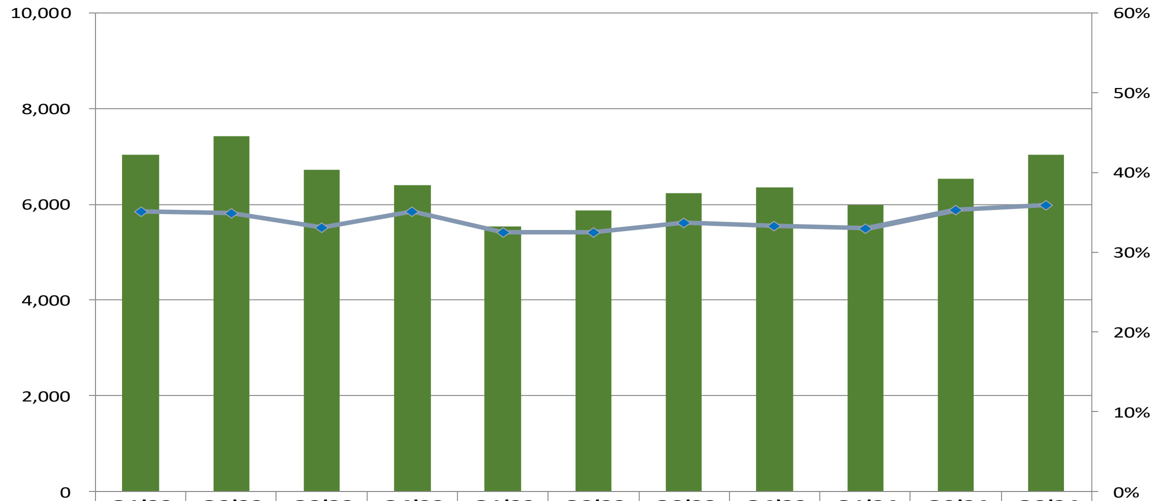
Financial Snapshot

(NT$ Millions)	Q2'24	Q3'24
Net Revenue(exclude revenue of subsidiary in China)	6,543.2	7,038.7
Gross Margin (%)	35.3%	35.9%
Expenses		
SG&A	507.7	535.9
R&D	203.2	222.8
EBITDA(exclude data of subsidiary in China)	3,231.5	3,331.9
EPS – diluted (NT$)	$1.55	$2.02
EPS – basic (NT$)	$1.56	$2.03

UTR (exclude data of subsidiary in China)



(NT$ Millions) Revenue and Gross Margin (exclude data of subsidiary in China)

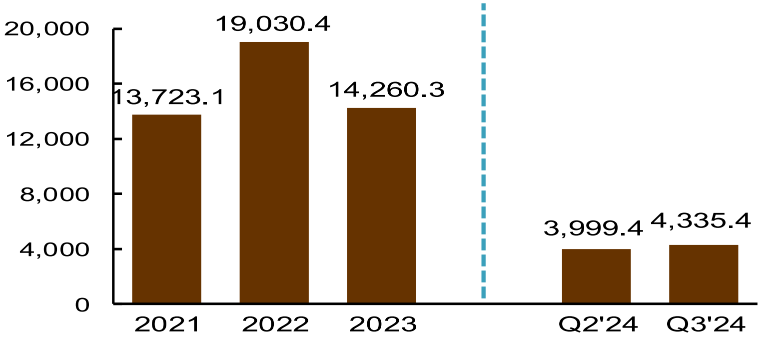


	Q1'22	Q2'22	Q3'22	Q4'22	Q1'23	Q2'23	Q3'23	Q4'23	Q1'24	Q2'24	Q3'24
Revenue (NT$ Millions)	7,032	7,428	6,721	6,400	5,542	5,868	6,236	6,346	5,977	6,543	7,039
Gross Margin	35.1%	34.9%	33.1%	35.1%	32.5%	32.5%	33.7%	33.3%	33.0%	35.3%	35.9%

Optimal financial leverage enhances shareholder interest

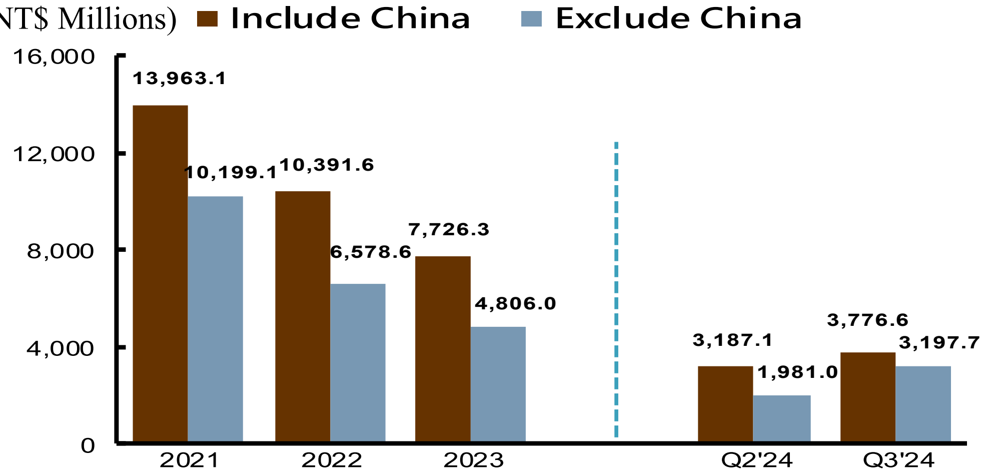
Cash Flow from Operations

(NT$ Millions)



CapEx

(NT$ Millions)

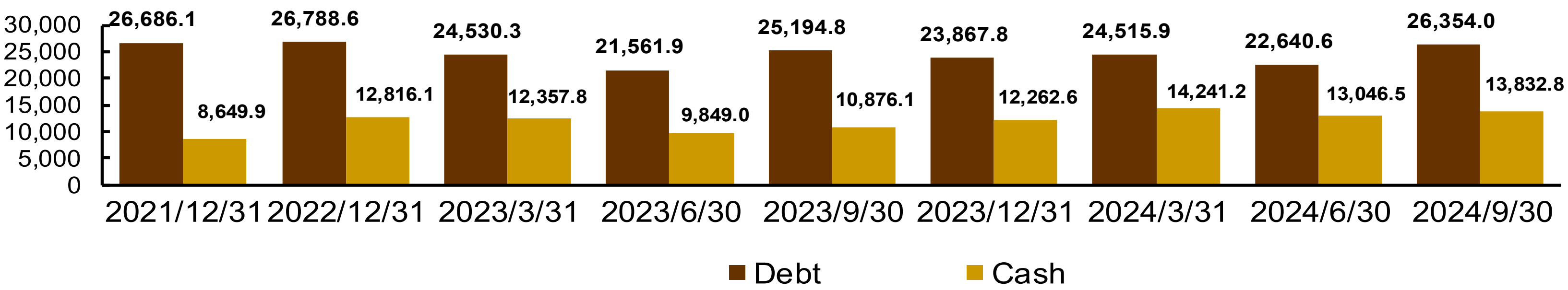


Debt | Cash

Net Debt/Equity

52.8% | 38.7% | 32.1% | 33.3% | 38.4% | 29.8% | 25.1% | 24.4% | 30.0%

(NT$ Millions)



Company website

http://www.kyec.com.tw