Wed, Sep 4, 2024

Bt1.339mn



Electronic Components

Close: 3/9/2024 SET ETRON Index Bloomberg ticker: SETETRON

12 685 84 +5.00 / +0.04%

Expect earnings growth to continue in 3Q24

We anticipate sector earnings growth to improve QoQ in 3Q24 despite the appreciation of the baht against the USD, thanks to high season and support from overall electronic demand in addition to the AI-driven replacement cycle for smartphones and PCs plus capacity expansion in the sector. We keep Outperform on KCE and HANA on good growth in core earnings in 2H24 and continued laggard valuation, discounted to 5-year historical average PE and to global peers. We maintain Neutral on DELTA as valuation is high and it may be affected by implementation of the global minimum tax.

Global electronics outlook in 2H24 remains solid. SIA, IDC and Gartner expect 17-20% growth in global semiconductor revenue in 2024 to US\$624bn. Backing the growth is recovery in the consumer electronics market and a booming AI industry, plus the AI-smartphone and AI-PC replacement cycle.

Smartphone market also expected to show YoY growth in 2H24. Canalys forecasts 4-5% YoY growth in global smartphone shipments in 2H24, spurred by the use of AI in smartphones, which will lead to a new upgrade cycle in 2H24. The event to watch is the launch of iPhone 16 on September 10. Investors expect this phone to be the biggest smartphone upgrade with AI-driven technology.

Expect modest growth for global automotive sales, driven by EVs. S&P Global Mobility and ING research forecast growth in global new car sales of 2.6-2.8% in 2024, driven by EVs. NEF forecasts global EV sales growth of 25-30% YoY in 2024. This will spur sales for automotive-related firms KCE (70% of total sales), DELTA (29%) and HANA (23%).

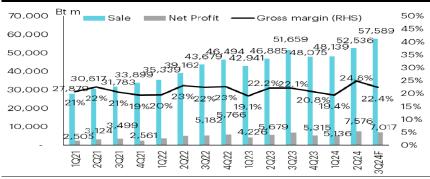
DELTA affected by GMT implementation. On March 1, 2024, the Thai Revenue Department released a draft legislation for the adoption of the Global Minimum Tax (GMT). This tax would erode DELTA's bottom line, reducing net profit by ~12% per year if implemented. Neither KCE nor HANA will be affected, as KCE's major shareholder is a Thai national and HANA's revenue is below the minimum criteria.

Expect Thai electronics earnings to continue to improve in 3Q24. Despite the impact on performance from the 6.9% QTD appreciation of the baht against the USD, we preliminarily forecast core earnings growth for the three electronics companies under coverage at 5.6% QoQ, with all three seeing growth QoQ: DELTA at 5.5%, HANA at 7.0% and KCE at 5.0%. On a YoY basis, the sector's core earnings are expected to improve 13.2%, growing at DELTA (17.8%) and KCE (18.4%) on better overall electronics demand; however, the weaker IC business YoY will pull HANA's earnings down 23.9%.

Valuation & recommendation. We assign Outperform to KCE (2025 TP Bt55) and HANA (2025 TP Bt56) on core earnings growth in 2H24 and continued laggard valuation, discounted to 5-year historical average PE and to global peers. We maintain Neutral on DELTA (2025 TP Bt109), seeing its valuation as high and in view of the potential impact from the global minimum tax.

Key risks are changes in customer purchasing power, prolonged geopolitical unrest, resumption of the US-China tech war and exchange rate volatility. Key ESG risks are labor management and suppliers (S).

Revenue and profit trend for electronic sector stocks under our coverage



Source: Company data and InnovestX Research

Valuation summary

	Rating	Drico	TD	ETD	D/E	(v)	P/BV (x)			
	Rating		(Bt)		-		-			
DELTA	Neutral	106.5	109.0	2.8	63.8	57.4	16.1	13.5		
HANA	Outperform	39.5	56.0	45.7	17.9	16.4	1.2	1.2		
KCE	Outperform	38.0	55.0	46.8	19.8	18.5	3.0	2.7		
Average					33.8	30.8	6.8	5.8		

Price performance

	Ab	solute		Relative to SET							
(%)	1M	ЗM	12M	1M	3M	12M					
DELTA	11.8	45.4	(2.3)	4.4	42.5	10.9					
HANA	(4.8)	0.0	(36.0)	(11.1)	(2.0)	(27.4)					
KCE	(8.4)	(5.6)	(24.4)	(14.5)	(7.5)	(14.2)					

rce: SET and InnovestX Rese

Analyst

Chaiwat Arsirawichai Fundamental Investment Analyst on Securities (66-2) 949-1021 Chaiwat.arsirawichai@scb.co.th

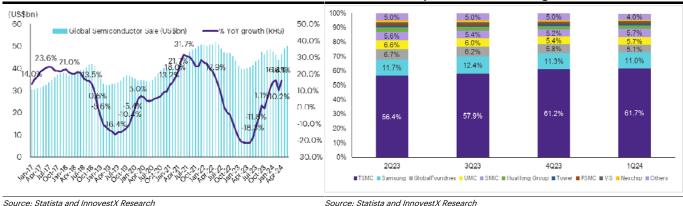


Global semiconductor sales continue to grow YoY. The SIA reports global semiconductor industry sales of US\$149.9bn in 2Q24, an increase of 18.3% YoY and 6.5% QoQ. Sales in June 2024 were US\$50.0bn, up 1.7% MoM. SIA represents 99% of the US semiconductor industry by revenue and nearly two-thirds of non-US chip firms.

World Semiconductor Trade Statistics has forecast 2024 growth of 13.1% for the global semiconductor market while the SIA expects semiconductor sales to achieve doubledigit growth in 2024. IDC and Gartner forecast global semiconductor revenue growth of 17-20% in 2024 to US\$624bn, underpinned by the recovery of the consumer electronics market and the booming AI industry.

The strong 2H24 momentum for global semiconductor sales will benefit the Thai electronics sector as it increases demand for electronic components, especially for Alrelated products.

Figure 1: Global semiconductor sales grew 18.3% YoY Figure 2: Semiconductor foundries revenue share worldwide still dominated by TSMC and Samsung in 2Q24



Source: Statista and InnovestX Research

Smartphone market expected to grow in 2H24. According to Canalys research, the worldwide smartphone market posted a 12% shipment expansion in 2Q24 to 288mn units. Samsung remained the global leader with an 18% market share on the high-end market. Apple followed closely with a 16% market share. Xiaomi came third, with a 15% market share, growing the fastest among the top five players with 27% annual growth. The growth in 2Q24 was heavily tied to increasing adoption of AI-powered smartphones, rising nearly 40% QoQ, based on an IDC report.

Growth is expected to continue in 2H24. Canalys forecasts a 4-5% YoY growth in global smartphone shipments in 2H24, with total shipments for the year expected to exceed 1.3bn units, with AI-driven smartphone upgrades expected to be a major growth driver. IDC projects that by the end of 2024, AI-powered smartphones could account for 20% of total shipments or ~200mn units in 2H24.

The headline event is the launch of iPhone 16 on September 10. Investors are expecting the iPhone 16 to be the biggest smartphone upgrade ever, with AI-driven technology.

This is good news for the Thai electronics sector given its consumer electronics-related portfolios, particularly for HANA (8% of total sales).



Electronic Components

Figure 3: Global smartphone shipment forecasts

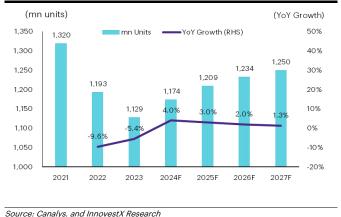
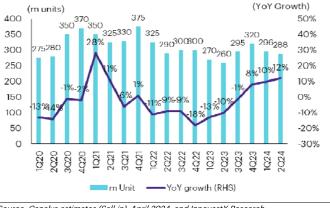


Figure 4: Global smartphone shipment on quarterly basis



Source: Canalys estimates (Sell-in), April 2024, and InnovestX Research

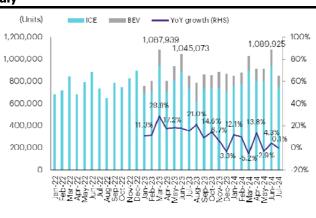
Global automotive sales show mixed performance. In 2Q24, European car sales grew strongly at 4.6% YoY and 5.4% QoQ, according to the European Automobile Manufacturers' Association. Though EV sales in Europe were flat YoY, they did grow 13.8% QoQ. In the US, light vehicle sales increased by 2.4% YoY and 9.2% QoQ, while Chinese car sales were flat YoY but grew 8.3% YoY in 2Q24. In 2024, both S&P Global Mobility and ING Research forecasts growth in global new car sales: the former at 2.8% and the latter at 2.6%.

This will benefit automotive-related electronic component makers KCE (70% of total sales), DELTA (29%) and HANA (23%).



Figure 5: US new car registrations slid 2% YoY in July

Figure 6: EU new car registrations grew 0.2% YoY in July



Source: The European Automobile Manufacturers' Association, and InnovestX Research

EV sales remain solid YoY led by China. TrendForce reports global sales growth of New Energy Vehicles (NEVs) at 30% QoQ and 24.2% YoY, to 3.769m units in 2Q24, including 8% YoY growth in Battery Electricity Vehicles (BEVs) and 64.2% YoY growth in Plug-in Hybrid Electric Vehicles (PHEVs) and Fuel Cell Vehicles (FCVs). Note that Tesla remains the leader in the BEV market with a 19.1% share of the market in 2Q24, followed by BYD (18.0%), Volkswagen (4.6%), SAIC-GM-Wuling (4.6%) and BMW (4.3%). In the PHEV market, BYD is the leader with a 36.1% market share, followed by Li Auto (7.6%), AITO (6.3%), Changan (4.1%) and Volvo (3.2%). This reflects the impact of China's NEV replacement subsidies. This recently introduced subsidy program is expected to further boost sales and market share for Chinese brands. According to regulations issued by China's Ministry of Commerce and other departments, subsidies for scrapping vehicles and purchasing either fuel or NEVs have been doubled, with buyers of NEVs eligible for CNY 20,000. This policy will be in effect until January 10, 2025.

Source: countryeconomy, and InnovestX Research



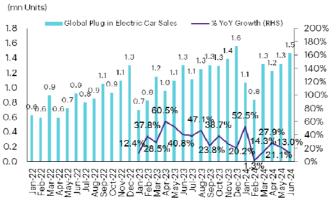
Despite the short-term concern over high interest rates and the EV price war, Bloomberg NEF forecasts global EV sales growth of 25-30% YoY in 2024, in line with the IEA, which expects EV sales to account for ~18% of total global car sales in 2024, up from ~14% in 2023. The China EV market is expected to lead with ~10mn EV sales (+31.6% YoY) in 2024. In Europe, EV sales are forecast at 3.9mn (+21.9% YoY) in 2024, with the US reaching 2.2mn EV sales (+26.8% YoY). BYD, the world's second-largest manufacturer of BEVs by market share, targets 2024 sales of 3.6mn units, a 20% YoY increase from the 3mn units sold in 2023.

A key element to watch is a potential prolonged price war on new EV models that could lead buyers to delay purchases in hopes of lower prices later. We expect EV prices to decline in 2024 due to efforts by CATL and BYD to slash battery costs, hoping to cut battery prices by as much as 50% this year, which means battery packs may cost half as much at end-2024 than at end-2023. CATL announced that it successfully reduced the cost of its lithium-ion batteries by ~20% YoY in 2Q24 via an improved manufacturing process, more economical raw material sourcing via greater use of lithium iron phosphate (LFP) as well as new battery technology, high-charge-rate batteries (6C).





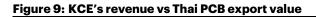


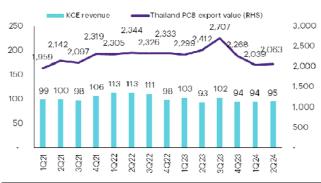


Source: TradingEconomic, and InnovestX Research

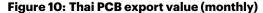
Source: InsideEVs.com and InnovestX Research

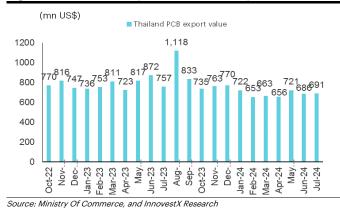
Thai July 2024 data suggests overall electronics demand shows signs of recovery. Recently released data shows MoM growth in Thailand's PCB exports, with export value up to US\$691mn in July 2024 from US\$686mn in June 2024. Our study indicates PCB export value has a strong positive correlation with KCE's revenue (in US dollars) as KCE is a major exporter of PCBs, particularly for the automotive industry. However, we expect PCB demand to improve in 2H24 on high demand for its high margin HDI products plus a debottlenecking of KCE's HDI production capacity from 4Q24 onwards.





Source: Company data, Ministry Of Commerce. and InnovestX Research







We also observe an improved MoM trend in the export value of electrical transformers at US\$436mn in July 2024 from US\$376mn in June. Based on our analysis, the export value of electrical transformers has a strong positive correlation with DELTA's exports of EV power products to Europe and the US. The MoM export growth thus suggests that contribution to DELTA's revenue from EV power products may improve in 3Q24F, boosted by improving demand plus expected strong demand for AI-related products.

Figure 11: DELTA's EV power revenue vs Thai electronic transformer export value







Source: Company data. Ministry of Commerce. and InnovestX Research

Source: Ministry of Commerce. and InnovestX Research

DELTA exposed to global minimum tax of 15%. On 1 March 2024, the Thai Revenue Department released a draft legislation for the adoption of the Global Anti-Base Erosion Rules (GloBE rules) in Thailand to align with the OECD. Under the GMT agreement, if a country levies a tax rate below 15%, other countries will be able to impose a top-up tax that brings the total up to the minimum level. The scope of the GMT act will include multinational corporations with total revenue over €750mn (Bt29.18bn) per year. After the draft is approved by the Cabinet, the Revenue Department will start public hearings, in which citizens and stakeholders will be invited to submit their opinions through the department's website. The implementation date is unknown but is expected in 2025.

We expect DELTA to be affected by this GMT as its major shareholder is DELTA Taiwan (making it multinational) and its revenue is forecast at Bt172bn in 2024 (above the Bt29.2bn criteria). Since DELTA's effective tax rate was 3.0% in 2022-23, by our estimates, the GMT could slice ~12% off DELTA's bottom line per year. Neither KCE nor HANA will be affected by the GMT, as KCE's major shareholder is Thai and HANA's yearly revenue remains below the criteria of Bt29.2bn.

Expect Thai electronics earnings to continue growing in 3Q24. We base our expectation on good forecasts for semiconductor sales, global car sales and expected smartphone shipments in 3Q24 as well as the high season for demand, which will support sales growth, underwritten by strong demand for AI-related products as well as new AI smartphones and AI PCs. Also contributing to the good earnings momentum will be capacity expansions by DELTA (commercial startup of DELTA Plant 8) and HANA (more RFID and silicon carbide machines) and KCE (improved production efficiency for its high-margin product, HDI). Despite the hurt from the 6.9% QTD appreciation of the baht against the USD, we preliminarily forecast core earnings growth for the three electronics companies under coverage at 5.6% QoQ, with QoQ growth at all three: DELTA at 5.5%, HANA at 7.0% and KCE at 5.0%. On a YoY basis, the sector's core earnings are expected to improve 13.2%, growing at DELTA (17.8%) and KCE (18.4%) on better overall electronics demand; however, the weaker IC business YoY will pull HANA's earnings down 23.9% YoY.



Figure 13: Revenue and earnings momentum for the Electronics sector

FY December 31	(Unit)	2Q23	3Q23	4Q23	1Q24	2Q24	3Q24F	%YoY	%QoQ
Electronic Sector									
Total revenue	(Btmn)	46,885	51,659	48,075	48,139	52,536	57,589	11.5%	9.6%
Gross Margin	(%)	22.2%	22.1%	20.8%	19.4%	24.8%	22.4%	0.3%	-2.4%
Net profit	(Btmn)	5,679	6,682	5,315	5,136	7,576	7,017	5.0%	-7.4%
Core profit	(Btmn)	5,497	6,196	5,536	4,585	6,647	7,017	13.2%	5.6%
DELTA									
Total revenue	(Btmn)	36,077	40,778	37,759	37,989	41,772	45,949	12.7%	10.0%
Gross Margin	(%)	23.9%	23.2%	24.5%	21.0%	26.9%	23.9%	0.7%	-3.0%
Net profit	(Btmn)	4,668	5,429	4,711	4,308	6,565	5,944	9.5%	-9.5%
Core profit	(Btmn)	4,434	5,047	4,775	3,815	5,634	5,944	17.8%	5.5%
HANA									
Total revenue	(Btmn)	6,910	6,555	6,221	6,371	6,752	7,427	13.3%	10.0%
Gross Margin	(%)	15.0%	15.7%	5.7%	10.8%	12.4%	12.3%	-3.5%	-0.1%
Net profit	(Btmn)	635	734	125	313	376	516	-29.7%	37.2%
Core profit	(Btmn)	743	678	297	350	482	516	-23.9%	7.0%
KCE									
Total revenue	(Btmn)	3,898	4,326	4,094	3,780	4,012	4,212	-2.6%	5.0%
Gross Margin	(%)	19.1%	22.0%	22.4%	23.1%	24.8%	24.0%	2.0%	-0.8%
Net profit	(Btmn)	376	520	478	515	635	557	7.3%	-12.2%
Core profit	(Btmn)	320	471	464	421	531	557	18.4%	5.0%

Source: Company data, InnovestX Research

Figure 14: Revenue and profit trend for electronic sector

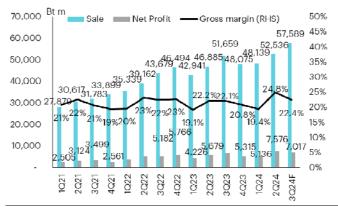
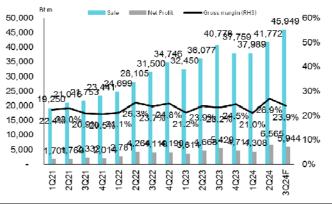
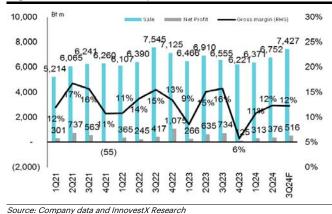


Figure 15: Revenue and profit trend for DELTA



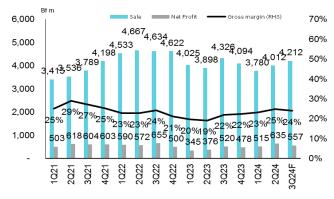
Source: Company data and InnovestX Research

Figure 16: Revenue and profit trend for HANA



Source: Company data and InnovestX Research

Figure 17: Revenue and profit trend for KCE



Source: Company data and InnovestX Research



Valuation & Recommendation. SETETRON (+17.6% YTD) has outperformed the SET index (-5.5% YTD), underwritten by positive sentiment brought by the strong share price performance of global technology companies, backed by the rapid adoption of generative AI technologies that has shoved up demand for advanced semiconductors and AI-related hardware. We believe the positive momentum will continue in 2H24, which is the sector's high season, aided by capacity additions but partially offset by the impact from the appreciation of the baht against the USD. Based on our sensitivity analysis, every Bt1.0/USD appreciation slices 7.1% off DELTA 2024 earnings, 5.1% off HANA and 5.0% off KCE.

KCE. We expect 3Q24 earnings to increase 18.1% YoY and 5.0% QoQ on an expected growth in revenue of 5% QoQ (-2.6% YoY), secured by high orders for high-margin products and cost-savings programs. However, we expect gross margin to narrow to 24% in 3Q24 from 24.8% in 2Q24 due to high copper price and appreciation of the Thai baht against the USD; we expect gross margin to peak in 4Q24 as the full benefit from the efficiency improvements kicks in and it finishes debottlenecking its high-margin HDI production capacity. We expect net profit to surge 32% in 2024. Additionally, its valuation is attractive, currently trading at a PE ratio of only 19.8x for 2024, which is -1SD below its 5-year PE mean of 32.1x. Our 2025 target price is Bt55.0, based on 27X PE or -0.5 SD of its 5-year historical PE mean.

HANA. We expect 3Q24 earnings to show improvement from smartphone-related (8% of total revenue) and RFID (13% of revenue) products, which are expected to drive growth in 2H24 due to low inventory levels and strong demand from the AI smartphone replacement cycle and a boost in the RFID business following the signing of an agreement with Michelin (the world's largest tire manufacturer) that allows HANA to manufacture/sell RFID tire tags to other tire manufacturers. Another growth impetus will come from the upcoming expansion in silicon carbide (SiC) production capacity. HANA plans to ramp up its high energy implanted ignition (HEI) machines significantly, from just one machine in 4Q23 to five by 1Q25 (adding one machine per quarter). This expansion is expected to drive the SiC business to EBITDA breakeven within 2025. We maintain our Outperform rating on HANA with a 2025 target price of Bt56.0 based on 23.4X of +0.5 SD of its 5-year historical PE mean.

DELTA. We expect 3Q24 earnings to improve QoQ on the back of stronger Al-related product demand, assuming some baht appreciation against the USD and no extraordinary expenses. We also note that DELTA Taiwan reported strong monthly sales in July of NT\$37.3bn, up 7.2% YoY and 7.2% MoM, indicating strong overall demand for power supply, data center infrastructure solutions, and AI server power supplies. We expect DELTA Thailand to also benefit from this growth engine. Al-related products are expected to continue to grow, with AI sales as a percentage of total sales expected to rise to 10% this year from 3-5% last year. We believe DELTA Thailand is conducting R&D in collaboration with DELTA Taiwan. The proportion of AI-related sales is expected to be in line with the target of parent DELTA Taiwan, at ~10% this year and 20-25% next year. EV power sales are expected to return to strong growth in 2H24 based on customer commitments, for which DELTA has prepared production capacity. Moreover, we notice that Thailand's export value of electrical transformers strongly rebounded in July and this should support EV power sales for DELTA. However, it is currently trading at a 2024 PE of 61.9x, which is close to its 5-year PE mean and it also may face impact from the GMT implementation in 2025. Therefore, we maintain our Neutral recommendation with a 2025 target price of Bt109.0 based on PE of 59x or at +0.5 SD of its 5-year historical PE mean.

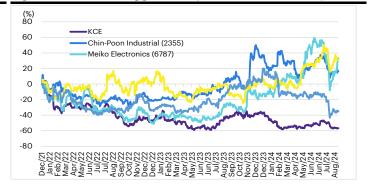


Electronic Components

Figure 18: KCE's PE BAND

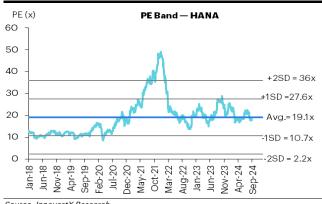


Figure 19: KCE still laggard compared with Auto PCB peers



Source: InnovestX Research

Figure 20: HANA's PE BAND



80 (%) 60 HANA STM 40 ON INFN 20 O -20 -40 -60 -80

È

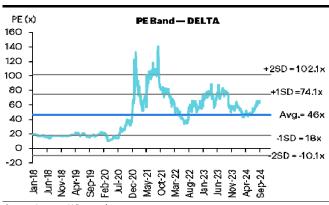
Sec. S

e e ave ave ŝÈ

Figure 21: HANA's share price also laggard peers

Source: InnovestX Research

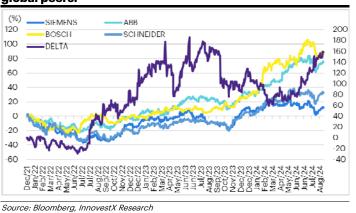
Figure 22: DELTA's PE BAND



Source: Bloomberg, InnovestX Research

Source: Bloomberg, and InnovestX Research

Figure 23: DELTA's share price is back to outperformed global peers.



Source: InnovestX Research

Figure 24: Valuation summary (price as of Sep 3, 2024)

	Rating Price		Target	ETR	P	/E (x)	EPS g	rowth	(%)	P/	BV (x))	RO	E (%)	Div.	Yield	(%)	EV/E	BITDA	(x)
		(Bt/Sh)	(Bt/Sh)	(%)	23A	24F 25F	23A	24F	25F	23A	24F	25F	23A	24F	25F	23A	24F	25F	23A	24F	25F
DELTA	Neutral	106.50	109.0	2.8	75.0	63.8 57.4	22	18	11	19.7	16.1	13.5	29	28	26	0.4	0.5	0.5	59.0	54.1	48.2
HANA	Outperform	39.50	56.0	45.7	15.9	17.9 16.4	(16)	(11)	9	1.1	1.2	1.2	8	7	7	2.5	3.9	4.3	11.4	10.3	9.9
KCE	Outperform	38.00	55.0	46.8	28.6	19.8 18.5	(31)	45	7	3.3	3.0	2.7	12	16	15	1.6	2.0	2.2	15.5	12.6	12.5
Average					39.8	33.830.8	(9)	17	9	8.0	6.8	5.8	16	17	16	1.5	2.1	2.3	28.6	25.6	23.5

Source: InnovestX Research

Electronic Components



Disclaimer

The information in this report has been obtained from sources believed to be reliable. However, its accuracy or completeness is not guaranteed. Any opinions expressed herein reflect our judgment at this date and are subject to change without notice. This report is for information only. It is not to be construed as an offer, or solicitation of an offer to sell or buy any securities. We accept no liability for any loss arising from the use of this document. We or our associates may have an interest in the companies mentioned therein.

InnovestX Securities Company Limited ("INVX") is wholly owned by SCB X Public Company Limited ("SCBX") and The Siam Commercial Bank Public Company Limited ("SCB") is majority-owned by SCBX. Any information related to SCB is for sector comparison purpose.

This document is prepared by InnovestX Securities Company Limited ("INVX") which is wholly owned by SCB X Public Company Limited ("SCBX"). The Siam Commercial Bank Public Company Limited, which is majority-owned by SCBX, acts as financial advisor of the LH Hotel Leasehold Real Estate Investment Trust. Any opinions, news, research, analyses, prices, statements, forecasts, projections and/or other information contained in this document (the "Information") is provided as general information purposes only and shall not be construed as individualized recommendation of an offer to buy or sell or the solicitation of an offer to buy or sell any securities. INVX and/or its directors, officers and employees shall not be liable for any direct, indirect, incidental, special or consequential loss or damage, resulting from the use of or reliance on the Information, including without limitation to, damages for loss of profits. The investors shall use the Information in association with other information and opinion, including their own judgment in making investment decision. The Information is obtained from sources believed to be reliable, and INVX cannot guarantee the accuracy, completeness and/or correctness of the Information.

INVX reserves the right to modify the Information from time to time without notice and in its sole discretion. This document is delivered to intended recipient(s) only and is not permitted to reproduce, retransmit, disseminate, sell, distribute, republish, circulate or commercially exploit the Information in any manner without the prior written consent of INVX.

Futures and Options trading carry a high level of risk with the potential for substantial losses, and are not suitable for all persons. Before deciding to trade Futures and Options, you should carefully consider your financial position, investment objectives, level of experience, and risk appetite if Futures and Options trading are appropriate. The possibility exists that you could sustain a loss of some or all of your initial investment. You should be aware of all the risks associated with Futures and Options trading, and you are advised to rely on your own judgment while making investment decision and/or should seek advice from professional investment advisor if you have any doubts.

This document is delivered to intended recipient(s) only and is not permitted to reproduce, retransmit, disseminate, sell, distribute, republish, circulate or commercially exploit the Information in any manner without the prior written consent of INVX.

© Copyright 2022 InnovestX Securities Co., Ltd. All right reserved.



CG Rating 2023 Companies with CG Rating

Companies with Excellent CG Scoring

7UP, AAV, ABM, ACE, ACG, ADB, ADD, ADVANC, AEONTS, AF, AGE, AH, AHC, AIRA, AIT, AJ, AKP, AKR, ALLA, ALT, AMA, AMARIN, AMATA, AMATAV, ANAN, AOT, AP, APCO, APCS, ARIP, ARROW, ASEFA, ASK, ASP, ASW, ATP30, AUCT, AWC, AYUD, B, BA, BAFS, BAM, BANPU, BAY, BBGI, BBIK, BBL, BC, BCH, BCP, BCPG, BDMS, BEC, BEM, BEYOND, BGC, BGRIM, BH, BIZ, BJC, BJCHI, BKI, BLA, BOL, BPP, BRI, BROOK, BRR, BTS, BTW, BWG, BYD, CBG, CENTEL, CFRESH, CHASE, CHEWA, CHG, CHOW, CIMBT, CIVIL, CK, CKP, CM, CNT, COLOR, COM7, COTTO, CPALL, CPAXT, CPF, CPI, CPL, CPN, CPW, CRC, CRD, CSC, CSS, CV, DCC, DDD, DELTA, DEMCO, DMT, DOHOME, DRT, DUSIT, EA, EASTW, ECF, ECL, EE, EGCO, EPG, ERW, ETC, ETE, FE, FLOYD, FN, FPI, FPT, FSX, FVC, GBX, GC, GCAP, GENCO, GFPT, GGC, GLAND, GLOBAL, GPSC, GRAMMY, GULF, GUNKUL, HANA, HARN, HENG, HMPRO, HPT, HTC, ICC, ICHI, ICN, III, ILINK, ILM, IMH, IND, INET, INTUCH, IP, IRC, IRPC, ITC, ITEL, IVL, JAS, JTS, KBANK, KCC, KCE, KEX, KKP, KSL, KTB, KTC, KTMS, KUMWEL, KUN, LALIN, LANNA, LH, LHFG, LIT, LOXLEY, LPN, LRH, LST, M, MAJOR, MALEE, MATCH, MBK, MC, M-CHAI, MCOT, MEGA, MFC, MFEC, MILL, MINT, MONO, MOONG, MSC, MST, MTC, MTI, NC, NCH, NCL, NDR, NER, NKI, NOBLE, NRF, NTV, NVD, NWR, NYT, OCC, OISHI¹, ONEE, OR, ORI, OSP, OTO, PAP, PATO, PB, PCSGH, PDG, PDJ, PG, PHOL, PIMO, PJW, PLANB, PLAT, PLUS, PM, POLY, PORT, PPP, PPS, PR9, PRG, PRINC, PRM, PRTR, PSH, PSL, PT, PTC, PTT, PTTEP, PTTGC, Q-CON, QH, QTC, RATCH, RBF, RPH, RS, RT, S, S&J, SA, SABINA, SAK, SAMART, SAMTEL, SAPPE, SAT, SBNEXT, SC, SCB, SCC, SCC, SCG, SCG, SCM, SDC, SEAFCO, SEAOIL, SECURE, SELIC, SENA, SENX, SFP2, SFT, SGC, SGF, SGP, SHR, SICT, SIRI, SIS, SITHAI, SJWD, SKR, SM, SMPC, SMT, SNC, SNNP, SNP, SO, SPALI, SPC, SPCG, SPI, SPRC, SR, SSC, SSF, SSSC, STA, STC, STGT, STI, SUC, SUN, SUSCO, SUTHA, SVI, SYNC, SYNCX, SYNC SYNTEC, TACC, TAE, TCAP, TCMC, TEAMG, TEGH, TFG, TFMAMA, TGE, TGH, THANA, THANI, THCOM, THIP, THRE, THREL, TIDLOR, TIPH, TISCO, TK, TKN, TKS, TKT, TLI, TM, TMC, TMD, TMT, TNDT, TNITY, TNL, TNR, TOA, TOG, TOP, TPBI, TPCS, TPIPL, TPIPP, TPS, TQM, TQR, TRT, TRUE, TRV, TSC, TSTE, TSTH, TTA, TTB, TTCL, TTW, TURTLE, TVDH, TVH, TVO, TVT, TWPC, UAC, UBE, UBIS, UKEM, UP, UPF, UPOIC, UV, VCOM, VGI, VIBHA, VIH, VL, WACOAL, WGE, WHA, WHAUP, WICE, WINNED, WINNER, XPG, YUASA, ZEN

Companies with Very Good CG Scoring

2S, A5, AAI, AIE, ALUCON, AMR, APURE, ARIN, AS, ASIA, ASIAN, ASIMAR, ASN, AURA, BR, BSBM, BSRC, BTG, CEN, CGH, CH, CHIC, CI, CIG, CMC, COMAN, CSP, DOD, DPAINT, DV8, EFORL, EKH, ESTAR, EVER, FORTH, FSMART, FTI, GEL, GPI, HEALTH, HUMAN, IFS, INSET, IT, J, JCKH, JDF, JKN, JMART, JUBILE, K, KCAR, KGI, KIAT, KISS, KK, KTIS, KWC, KWM, LDC, LEO, LHK, MACO, METCO, MICRO, MK, MVP, NCAP, NOVA, NTSC, PACO, PIN, PQS, PREB, PRI, PRIME, PROEN, PROS, PROUD, PSTC, PTECH, PYLON, RCL, SALEE, SANKO, SCI, SCN, SE, SE-ED, SFLEX, SINGER, SKN, SONIC, SORKON, SPVI, SSP, SST, STANLY, STP, SUPER, SVOA, SWC, TCC, TEKA, TFM, TMILL, TNP, TPLAS, TPOLY, TRC, TRU, TRUBB, TSE, VRANDA, WAVE, WFX, WIIK, WIN, WP, XO

Companies with Good CG Scoring

24CS, AMANAH, AMARC, AMC, APP, ASAP, BCT, BE8, BIG, BIOTEC, BLESS, BSM, BVG, CAZ, CCET, CHARAN, CHAYO, CHOTI, CITY, CMAN, CMR, CRANE, CWT, DHOUSE, DTCENT, EASON, FNS, FTE, GIFT, GJS, GTB, GTV, GYT, HL, HTECH, HYDRO, IIG, INGRS, INSURE, IRCP, ITD, ITNS, JCK, JMT, JR, JSP, KBS, KGEN, KJL, L&E, LEE, MASTER, MBAX, MEB, MENA, META, MGT, MITSIB, MJD, MOSHI, MUD, NATION, NNCL, NPK, NSL, NV, OGC, PAF, PCC, PEACE, PICO, PK, PL, PLANET, PLE, PMTA, PPM, PRAKIT, PRAPAT, PRECHA, PRIN, PSG, RABBIT, READY, RJH, RSP, RWI, S11, SAAM, SAF, SAMCO, SAWAD, SCAP, SCP, SIAM, SKE, SKY, SMART, SMD, SMIT, SOLAR, SPA, STECH, STPI, SVR, TC, TCCC3, TEAM, TFI, TIGER, TITLE, TKC, TMI, TNH, TPA, TPAC, TRITN, UBA, UMI, UMS, UTP, VARO, VPO, W, WARRIX, WORK, WPH, YONG, ZIGA

Corporate Governance Report

The material contained in this publication is for general information only and is not intended as advice on any of the matters discussed herein. Readers and others should perform their own independent analysis as to the accuracy or completeness or legality of such information. The Thai Institute of Directors, its officers, the authors and editor make no representation or warranty as to the accuracy, completeness or legality of any of the information contained herein. By accepting this document, each recipient agrees that the Thai Institute of Directors Association, its officers, the authors and editor shall not have any liability for any information contained in, or for any omission from, this publication. The survey result is as of the date appearing in the Corporate Governance Report of Thai Listed Companies. As a result, the survey result may be changed after that date. InnovestX Securities Company Limited does not conform nor certify the accuracy of such survey result.

To recognize well performers, the list of companies attaining "Good", "Very Good" and "Excellent" levels of recognition (Not including listed companies qualified in the "no announcement of the results" clause from 1 January 2022 to 31 October 2023) is publicized.

¹OISHI was voluntarily delisted from the Stock Exchange of Thailand, effectively on September 6, 2023 ²SFP was voluntarily delisted from the Stock Exchange of Thailand, effectively on July 19, 2023

³TCCC was voluntarily delisted from the Stock Exchange of Thailand effectively on August 25, 2023

Anti-corruption Progress Indicator

Certified (ได้รับการรับรอง)

2S, AAI, ADVANC, AE, AF, AH, AI, AIE, AIRA, AJ, AKP, AMA, AMANAH, AMATAV, AP, APCS, AS, ASIAN, ASK, ASP, AWC, AYUD, B, BAFS, BAM, BANPU, BAY, BBGI, BBL, BCH, BCP, BCPG, BE8, BEC, BEYOND, BGC, BGRIM, BLA, BPP, BRR, BSBM, BTC, BTS, BWG, CEN, CENTEL, CFRESH, CGH, CHEWA, CHOTI, CHOW, CIG, CIMBT, CM, CMC, COM7, CPALL, CPAXT, CPF, CPI, CPL, CPN, CPW, CRC, CSC, DCC, DELTA, DEMCO, DIMET, DOHOME, DRT, DUSIT, EA, EASTW, ECF, EGCO, EP, EPG, ERW, ESTAR, ETC, ETE, FNS, FPI, FPT, FSMART, FTE, GBX, GC, GCAP, GEL, GFPT, GGC, GJS, GPI, GPSC, GSTEEL, GULF, GUNKUL, HANA, HARN, HENG, HMPRO, HTC, ICC, ICHI, IFS, III, ILINK, ILM, INET, INOX, INSURE, INTUCH, IRPC, ITEL, IVL, JAS, JKN, JR, JTS, KASET, KBANK, KBS, KCAR, KCE, KGEN, KGI, KKP, KSL, KTB, KTC, L&E, LANNA, LHFG, LHK, LPN, LRH, M, MAJOR, MALEE, MATCH, MBAX, MBK, MC, MCOT, META, MFC, MFEC, MILL, MINT, MONO, MOONG, MSC, MST, MTC, MTI, NATION, NCAP, NEP, NKI, NOBLE, NRF, NWR, OCC, OGC, OR, ORI, PAP, PATO, PB, PCSGH, PDG, PDJ, PG, PHOL, PIMO, PK, PL, PLANB, PLANET, PLAT, PM, PPP, PPPM, PPS, PR9, PRE9, PRG, PRINC, PRM, PROS, PSH, PSL, PSTC, PT, PTECH, PTG, PTT, PTTEP, PTTGC, PYLON, Q-CON, QH, QLT, QTC, RABBIT, RATCH, RML, RS, RWI, S&J, SAAM, SABINA, SAK, SAPPE, SAT, SC, SCC, SCCC, SCG, SCGP, SCM, SCN, SEAOIL, SE-ED, SELIC, SENA, SGC, SGP, SIRI, SITHAI, SKR, SMIT, SMK, SMPC, SNC, SNP, SORKON, SPACK, SPALI, SPC, SPI, SPRC, SRICHA, SSF, SSP, SSSC, SST, STA, STGT, STOWER, SUSCO, SVI, SYMC, SYNTEC, TAE, TAKUNI, TASCO, TCAP, TCMC, TFG, TFI, TFMAMA, TGE, TGH, THANI, THCOM, THIP, THRE, THREL, TIDLOR, TIPCO, TISCO, TKS, TKT, TMD, TMILL, TMT, TNITY, TNL, TNP, TNR, TOG, TOP, TOPP, TPA, TPCS, TRT, TRU, TSC, TSI, TSTE, TSTH, TTA, TTB, TTCL, TU, TVDH, TVO, TWPC, UBE, UBIS, UEC, UKEM, UOBKH, UV, VCOM, VGI, VIH, WACOAL, WHA, WHAUP, WICE, WIIK, XO, YUASA, ZEN, ZIGA

Declared (ประกาศเจตนารมณ์)

ACE, ADB, ALT, AMC, ASW, BLAND, BTG, BYD, CAZ, CBG, CV, DEXON, DMT, EKH, FSX, GLOBAL, GREEN, ICN, IHL, ITC, J, JMART, JMT, LEO, LH, MENA, MITSIB, MODERN, NER, NEX, OSP, PEER, PLUS, POLY, PQS, PRIME, PROEN, PRTR, RBF, RT, SA, SANKO, SCB, SENX, SFLEX, SIS, SKE, SM, SVOA, TBN, TEGH, TIPH, TKN, TPAC, TPLAS, TQM, TRUE, W, WPH, XPG N/A

24CS, 3K-BAT, A, A5, AAV, ABM, ACAP, ACC, ACG, ADD, ADVICE, AEONTS, AFC, AGE, AHC, AIT, AJA, AKR, AKS, ALL, ALLA, ALPHAX, ALUCON, AMARC, AMARIN, AMR, ANAN, ANI, AOT, APCO, APEX, APO, APP, APURE, AQUA, ARIN, ARIP, ARROW, ASAP, ASEFA, ASIA, ASIMAR, ASN, ATP30, AU, AUCT, AURA, B52, BA, BBIK, BC, BCT, BDMS, BEAUTY, BEM, BGT, BH, BIG, BIOTEC, BIS, BIZ, BJC, BJCHI, BKD, BKGI, BKIH, BLC, BLESS, BLISS, BM, BOL, BPS, BR, BRI, BROCK, BSM, BSRC, BTNC, BTW, BUI, BVG, CCET, CCP, CEYE, CFARM, CGD, CH, CHAO, CHARAN, CHASE, CHAYO, CHG, CHIC, CHO, CI, CITY, CIVIL, CK, CKP, CMAN, CMO, CMR, CNT, COCOCO, COLOR, COMAN, CPANEL, CPH, CPR, CPT, CRANE, CRD, CREDIT, CSP, CSR, CSS, CTW, CWT, D, DCON, DDD, DHOUSE, DITTO, DOD, DPAINT, DTCENT, DTCI, DV8, EASON, ECL, EE, EFORL, EMC, ETL, EURO, EVER, F&D, FANCY, FE, FLOYD, FM, FMT, FN, FORTH, FTI, FVC, GABLE, GENCO, GFC, GIFT, GL, GLAND, GLOCON, GLORY, GRAMMY, GRAND, GSC, GTB, GTV, GYT, HEALTH, HFT, HL, HPT, HTECH, HUMAN, HYDRO, 12, IIG, IMH, IND, INGRS, INSET, IP, IRC, IRCP, IT, ITD, ITNS, ITTHI, JAK, JCK, JCKH, JCT, JDF, JPARK, JSP, JUBILE, K, KAMART, KC, KCC, KCG, KCM, KDH, KEX, KIAT, KISS, KJL, KK, KKC, KLINIQ, KOOL, KTIS, KTMS, KUMWEL, KUN, KWC, KWI, KWM, KYE, LALIN, LDC, LEE, LIT, LOXLEY, LPH, LST, LTS, MAGURO, MANRIN, MASTER, MATI, MCA, M-CHAI, MCS, MDX, MEB, MEGA, METCO, MGC, MGI, MGT, MICRO, MIDA, MJD, MK, ML, MORE, MOSHI, MTW, MUD, MVP, NAM, NAT, NC, NCH, NCL, NCP, NDR, NEO, NETBAY, NEW, NEWS, NFC, NL, NNCL, NOK, NOVA, NPK, NSL, NTSC, NTV, NUSA, NV, NVD, NYT, OHTL, ONEE, ORN, PACO, PAF, PANEL, PCC, PEACE, PERM, PF, PHG, PICO, PIN, PJW, PLE, PLT, PMTA, POLAR, PORT, PPM, PRAKIT, PRAPAT, PRECHA, PRI, PRIN, PRO, PROUD, PSG, PSP, PTC, PTL, QTCG, RAM, RCL, READY, RICHY, RJH, ROCK, ROCTEC, ROH, ROJNA, RP, RPC, RPH, RSP, S, S11, SABUY, SAF, SAFARI, SAFE, SALEE, SAM, SAMART, SAMCO, SAMTEL, SAUCE, SAV, SAWAD, SAWANG, SBNEXT, SCAP, SCGD, SCI, SCL, SCP, SDC, SE, SEAFCO, SECURE, SFT, SGF, SHANG, SHR, SIAM, SICT, SIMAT, SINGER, SINO, SISB, SJWD, SK, SKN, SKY, SLM, SLP, SMART, SMD, SMT, SNNP, SO, SOLAR, SONIC, SPA, SPCG, SPG, SPREME, SPVI, SQ, SR, SSC, STANLY, STARK, STC, STEC, STECH, STHAI, STI, STP, STPI, STX, SUC, SUN, SUPER, SUTHA, SVR, SVT, SWC, SYNEX, TACC, TAN, TAPAC, TC, TCC, TCJ, TCOAT, TEAM, TEAMG, TEKA, TERA, TFM, TGPRO, TH, THAI, THANA, THE, THG, THMUI, TIGER, TITLE, TK, TKC, TLI, TM, TMC, TMI, TMW, TNDT, TNH, TNPC, TOA, TPBI, TPCH, TPIPL, TPIPP, TPL, TPOLY, TPP, TPS, TQR, TR, TRC, TRITN, TRP, TRUBB, TRV, TSE, TTI, TTT, TTW, TURTLE, TVH, TVT, TWP, TWZ, TYCN, UAC, UBA, UMI, UMS, UNIQ, UP, UPF, UPOIC, UREKA, UTP, UVAN, VARO, VIBHA, VL, VNG, VPO, VRANDA, WARRIX, WAVE, WELL, WFX, WGE, WIN, WINDOW, WINMED, WINNER, WORK, WORLD, WP, YGG, YONG, ZAA

Explanations

Companies participating in Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC) under Thai Institute of Directors (as of November 1, 2023) are categorised into: companies that have declared their intention to join CAC, and companies certified by CAC.