China / Hong Kong Industry Focus China Hardware Sector

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DBS Group Research . Equity

26 Nov 2024

Riding the Upgrade Wave in Emerging Markets

- Expect emerging markets' 8% y/y mobile phone growth to top other regions' 3% in 2025, fuelled by wealth-driven phone-to-smartphone shift
- Expect smartphone ASP increase of 7% y/y in 2025, echoing China's 2012-2016 upgrade trend
- Windows 11 migration drives business PC refresh cycle, boosting shipments by 7.4%
- BUY: <u>Xiaomi (1810)</u> and <u>BYDE (285)</u> to capitalise on emerging market growth, and <u>Lenovo (992)</u> due to PC replacements

Wealth effect to accelerate smartphone transition in 2025.

Strong stock market performance (Dow Jones Southeast Asia Index +24% YTD in 2024 vs. -4.1% average in 2021-23) and rising disposable incomes in emerging markets like India and Southeast Asia are set to boost consumption and accelerate the shift from feature phones to smartphones. This transition is expected to drive 8% y/y growth in mobile phone shipments in these markets in 2025, outpacing the 3.1% growth expected in other regions, and accounting for 28.3% of global shipments. A 7% y/y increase in average selling price (ASP) in emerging Asia, echoing China's 2012-2016 (7% p.a.) upgrade trend, and rising Al smartphone adoption are projected to lift global smartphone shipment growth to 4.4% y/y in 2025.

Expect PC OS migration to stimulate a business PC refresh. PC

replacement in 2025 will be led by commercial demand, driven by Windows 11 migration. The end of Windows 10 support in Oct 25 is expected to trigger a peak in the business PC refresh cycle during 1H25. With Windows 10 commanding 71.9% of the global operating system (OS) market in 2023 and Windows 11 requiring at least an Intel 8th Gen central processing unit (CPU), businesses are under pressure to upgrade. This will drive the replacement of a large share of the 299mn PCs shipped in 2018-2019. Combined with the launch of AI PCs powered by X86based AI CPUs, PC shipments are projected to grow 7.4% in 2025.

Prefer vendors with higher exposure to emerging markets.

Xiaomi, commanding a significant share of the smartphone market in India (16.7%) and Southeast Asia (15.5%), is well positioned to capitalise on faster-than-industry growth in shipments and ASP increases in these regions. BYDE is expected to continue benefitting from supplying chassis for Al-driven upgrades in the iPhone 17, with Apple leading the Al smartphone trend and expanding its sales in emerging markets. Lenovo is also set to gain from accelerating PC replacements, supported by its strong commercial PC market share. We maintain BUY on the stocks and raise Xiaomi's TP to HKD36.0.

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Recommendation & valuation

Company Name	Price HK\$	Target Price HK\$	Recom	Mkt Cap US\$m	PE 25F x
<u>BYD Electronic</u> (285 HK)	34.35	48.00	BUY	9,926	10.2
<u>Lenovo Group</u> (992 HK)	9.11	12.70	BUY	14,492	7.1
<u>Xiaomi Corp</u> <u>(1810 HK)</u>	28.40	36.00	BUY	90,969	22.9

Source: Thomson Reuters, DBS Bank (Hong Kong) Limited ("DBS HK")



China Hardware Sector

Introduction

The macroeconomic landscape and global stock market performance in 2024 have reshaped the dynamics of the consumer device market. Key drivers in the smartphone and PC segments are shifting, with the growth centre of consumer electronics transitioning from developed to emerging markets.

Wealth effect to unlock emerging market opportunities

Stock markets in Southeast Asia and India have experienced consistent, progressive uptrends throughout 2024, with the Dow Jones Southeast Asia Index rising +24% and India's NIFTY gaining +21%. This is in stark contrast to the annual averages of -4.1% and +12.2% from 2021 to 2023. Increased investor participation has driven this growth, with investor penetration in India rising from 3.6% in 2020 to 11.2% in 2024 and that of Vietnam growing from 2.4% to 8.0%, vs. China's growth from 12.6% to 15.1%. We believe the ongoing stock surge has boosted wealth in these regions, enhancing consumer confidence and spending power.

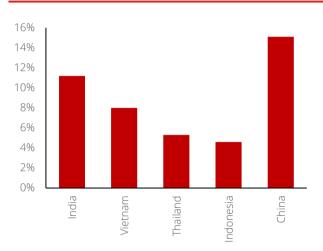
Emerging stock market performance comparison

Market	Index	YTD total return	1-year return	2021-23 avg. annual return
Malaysia	FBMKLCI	14.90%	14.09%	-8.20%
Thailand	SET	7.22%	6.32%	-8.50%
Vietnam	VNINDEX Index	9.42%	11.13%	-10.00%
Emerging Markets Asia	MSCI Emerging Markets Asia	16%	29.55%	NA
Indian	NiFTY	10.50%	21.09%	12.20%
Philippine	PCOMP Index	8.33%	12.70%	-4.30%
Dow Jones Southeast Asia Stock Index	P3DOW	20.56%	24.41%	-4.10%

Source: Bloomberg, DBS HK



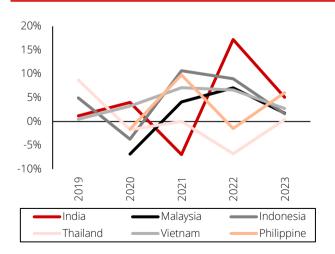
Investors penetration across emerging markets



Source: Vietnam Securities Depositary and Clearing Corporation, Wind, Association of Mutual Fund of India and DBS Bank

Together with the rising disposable incomes in emerging markets like India and Southeast Asia, which boost consumption sentiment on consumer electronics products, we expect the proportion of smartphones in total phone shipments to maintain the upward trend observed over the past two years. This shift is projected to drive mobile phone shipments in emerging Asia up by 8% y/y in 2025, far outpacing the 3.1% growth expected in developed regions. By 2025, emerging Asia is anticipated to account for 28.3% of global smartphone shipments.

Disposable income growth across different regions

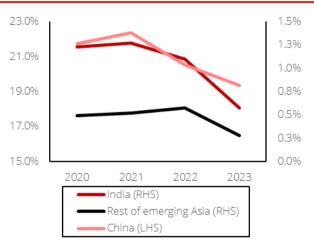


Source: CEIC, Statista and DBS Bank

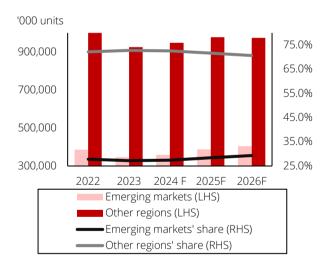
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Feature phone penetration in India and emerging Asia (2020–2024)



Source: Gartner and DBS Bank



Emerging markets smartphone shipment and share

Source: Bloomberg, DBS HK

10% 5% 0% -5% -10% -15% 2023 2024 F 2025F 2026F

Emerging markets smartphone shipment growth

Source: Gartner, DBS HK

Smartphone ASP trends replicating China's 2012–2016 growth

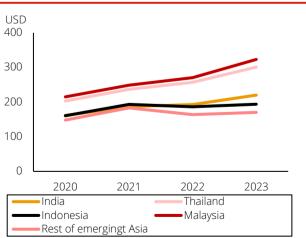
Emerging markets growth

Other regions growth

Global growth

In addition to growth in shipments, the transition from feature phones to smartphones is expected to drive an increase in average selling prices (ASPs). We anticipate ASP growth in emerging markets to replicate the trend observed in China during 2012–2016, when smartphone ASPs grew at an average of 7% annually, coinciding with peak shipments in 2016. Similarly, smartphone ASPs in India and other emerging markets are expected to rise by 7% in 2025.





Source: Gartner, DBS HK

Al-driven smartphone upgrades

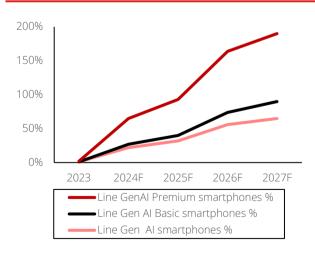
Beyond shipment and ASP growth, the adoption of Alenabled smartphones is emerging as another key driver of global growth. We expect the next generation of iPhones to feature substantial hardware upgrades optimised for Apple Intelligence, including:

- Enhanced AI computing power through improved SoCs and larger memory for edge AI
- Bigger batteries to support increased computing demand
- Lighter, optimised chassis designs for improved heat dissipation and to offset battery weight

The progressive rollout of features in Apple Intelligence is set to further drive AI smartphone penetration. iOS 18.4, launching in March 2025, will introduce advanced AI functionalities to enhance user interaction and adoption. Siri will provide more relevant, habit-based information by leveraging user preferences and on-screen context, enabling seamless interaction with apps through intuitive commands.

The combined software and hardware updates for Alenabled iPhones align with Apple's broader Al strategy, capturing customer and investor interest while accelerating the adoption of Al smartphones in 2025.

Al smartphone adoption rate trend



Source: Gartner, DBS HK

We expect both the phone-to-smartphone transition in emerging Asia and the rising adoption of AI smartphones to drive global mobile phone shipment growth to 4.4% y/y in 2025.



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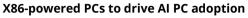


PC end-market trend

Commercial PC replacement fuelled by Windows transition

While smartphone growth remains primarily retail-driven, the PC market in 2025 is expected to be driven by commercial demand. The end of official support for Windows 10 in October 2025 is expected to trigger widespread PC replacements. With Windows 10 accounting for 71.9% of the global PC OS market in 2023, businesses face operational risks and compliance challenges without upgrades. Transitioning to Windows 11 requires newer hardware, such as at least Intel 8th Gen processors or AMD Ryzen 2000 CPUs, putting companies under pressure to upgrade.

PCs shipped during the 2018–2019 period (c.299mn units) are nearing the end of their typical five-year lifecycle, driving increased replacement demand. This cycle is expected to peak in 1H25, driven by the convergence of ageing hardware and OS migration.

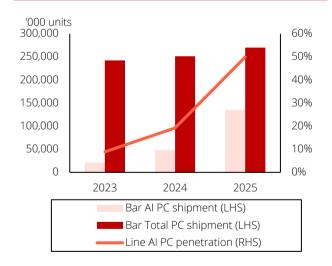


The introduction of AI PCs, particularly those powered by Intel's x86-based AI CPUs, is expected to further accelerate replacements. Currently, AI PCs, predominantly powered by Arm-based CPUs, have seen limited adoption due to their non-standardised specifications for corporate environments. The launch of x86-based AI PCs in December 2024 is anticipated to set new industry standards.

We project AI PC shipments to grow by 180% y/y in 2025, surpassing the market consensus of 166%, and to represent 50% of total PC shipments. This momentum is expected to build through 1Q25 and accelerate further into the year.

Global PC shipments to grow 7.4%

With the launch of AI PCs powered by x86-based AI CPUs and the replacement cycle driven by Windows 11 migration, we project PC shipment growth of 7.4% in 2025, exceeding the market's expectation of 4%-5%.



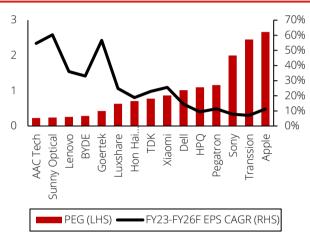
Global PC shipments and AI penetration

Source Gartner, DBS HK

Stock implications

Following the recent corrections, downstream component suppliers in the Hong Kong market now trade at an attractive valuation of 0.56 FY25F PEG, below the sector average of 0.99. Notable undervalued plays among vendors include Lenovo (0.26) and Xiaomi (0.87).

Downstream plays' PEG



Source: Visible Alpha, DBS HK

Preference for end-market plays

High exposure to India and emerging Asia

For end-market plays, we favour consumer electronics vendors with strong exposure to India and emerging Asian markets, established brand reputations in these regions, and broad product portfolios across different tiers. These vendors are well positioned to capitalise on the wealth effect and benefit from the feature phone-to-smartphone transition. They stand to gain from faster shipment growth and the ASP hike expected in emerging markets, which is outpacing that of developed markets.

Exposure to leading brands driving AI upgrades

Another key trend is the adoption of AI-enabled smartphones. We prefer supply chain players with significant exposure to leading brands driving AI smartphone upgrades. These companies are positioned to benefit from the increasing integration of AI-driven features, which are becoming critical differentiators in high-end devices.

High exposure to business applications for PC

In the PC market, we favour vendors with greater exposure to business applications and a robust AI PC pipeline for 2025. Business customers are particularly vulnerable to the impacts of Microsoft discontinuing official support for Windows 10. Vendors that cater to these needs are well



positioned to capitalise on the commercial replacement cycle and the rising demand for AI-enabled PCs.

Smartphone vendors' market share in emerging Asia

		Share 2Q24	Share 2Q23
Ranking	Vendor		
1	Samsung Electron	17.20%	18.10%
2	Vivo	13.10%	11.70%
3	Xiaomi	12.70%	10.40%
4	OPPO	11.10%	12.40%
5	Apple	3.00%	2.90%
6	Tecno	2.10%	2.60%
7	Lava International	2.10%	2.20%
8	Lenovo	2.00%	1.10%
9	Honor	0.60%	0.30%
10	Micromax	0.50%	0.70%
	Other	35.80%	37.40%
	Grand Total	100.00%	100.00%

Source: Gartner, DBS HK

Preferred stocks:

Xiaomi: With 13% exposure to emerging markets in 2Q24 (up from 10% in 2Q23), Xiaomi is well positioned to capitalise on the feature phone-to-smartphone transition. Its broad product portfolio, from Redmi (low-tier) to POCO (mid-tier) and Mix/Fold (high-tier), caters to diverse consumer segments. We raise FY25F and FY26F earnings forecasts by 5.0% and 4.2% to reflect faster-than-expected shipment and ASP growth, and maintain BUY with a higher TP of HKD36.0, based on 28x FY25F PE.

BYDE: As a key supplier of chassis for Al-optimised iPhones, BYDE is poised to benefit from next-generation Apple Intelligence capabilities. Additionally, its role in Xiaomi's supply chain positions it well to capture growth in emerging markets. We forecast FY25F earnings growth of 48% and maintain a BUY rating with a TP of HKD43, reflecting an attractive 0.29x FY25F PEG.

Lenovo: With 67.7% exposure to commercial PC clients and the largest global market share (23%) in this space, Lenovo is positioned to capitalise on the 2025 replacement cycle. Its robust AI PC pipeline, including the ThinkPad, Yoga, and IdeaPad models, is expected to drive AI PC shipments up 125.9% y/y in FY25F. We forecast FY25/26F earnings growth of 46.6%/45.0% and maintain a BUY rating.



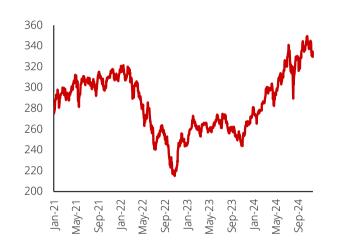
Peers valuation

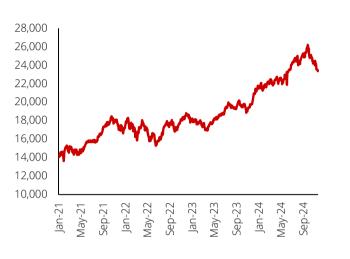
			-	Target		Mkt		PE	PE	Yield	Yield	P/Bk	P/Bk	EV/EE	BITDA	ROE	ROE
			Price	Price I	Recom	Cap	Fiscal	24F	25F	24F	25F	24F	25F	24F	25F	24F	25F
Company Name	Code Ci	urrency	Local\$	Local\$		US\$m	Yr	х	х	%	%	х	х	х	х	%	%
AAC Technologies*	2018 HK	HKD	36.6	43.00	BUY	5,625	Dec	19.2	15.6	1.6	1.9	1.7	1.6	6.8	5.9	9.3	10.6
BYD Electronic*	285 HK	HKD	34.35	48.00	BUY	9,926	Dec	15.2	10.2	2.0	2.9	2.2	1.9	6.4	5.1	15.3	20.1
Lenovo Group*#	992 HK	HKD	9.11	12.70	BUY	14,492	Mar	10.2	7.1	3.8	5.5	2.3	2.0	4.6	3.5	25.3	32.5
Luxshare*	002475 CH	CNY	36.66	57.00	BUY	36,613	Dec	17.4	14.7	0.5	0.6	3.7	3.0	9.1	7.7	23.7	22.4
Q Technology*	1478 HK	HKD	5.95	4.12	BUY	904	Dec	15.6	10.1	0.4	0.0	1.2	1.1	4.4	3.2	8.4	11.7
Sunny Optical*	2382 HK	HKD	58.9	80.00	BUY	8,270	Dec	20.4	15.0	0.4	1.0	2.4	2.1	5.3	3.6	12.4	14.9
Xiaomi*	1810 HK	HKD	28.4	36.00	BUY	90,969	Dec	33.8	22.9	0.0	0.0	3.6	3.2	20.8	14.5	11.2	14.3

FY24: FY25; FY25: FY26

Source: Thomson Reuters, *DBS HK

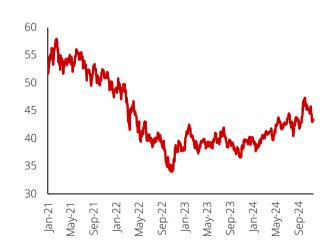






Source: Bloomberg

iShares MSCI Emerging Markets ETF



Source: Bloomberg

Source: Bloomberg

NSE Nifty 50 Index

FTSE Bursa Malysia KLCI Index



Source: Bloomberg

Dow Joes Southeast Asia trend

Thai SET Index

China Hardware Sector



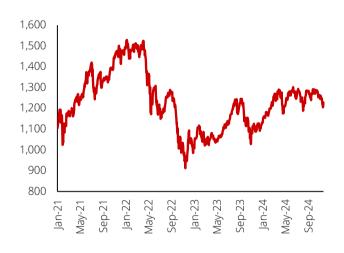
1,800 1,700 1,600 1,500 1,400 1,300 1,200 Sep-24 Jan-22 Jan-24 May-24 May-22 Sep-22 Jan-23 May-23 Sep-23 Jan-21 May-21 Sep-21



Source: Bloomberg

Source: Bloomberg

Vietnam Ho Chi Minh Stock Index



Source: Bloomberg

Philippines Stock Exchange PSEi Index

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*Share price appreciation + dividends

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