Kingboard Laminates

Investor meeting takeaways: price hike to sustain in 2H; rising AI mix; PO to HK$65

Reiterate Rating: BUY | PO: 65.00 HKD | Price: 43.94 HKD

Greater 2H earnings momentum; price hike to sustain

We hosted Kingboard Laminates (KBL) mgmt. on 27 Aug. Mgmt. noted CCL price hikes have a delayed effect of 1-2 months on profits due to longer lead times (1-2 months vs 7-10 days previously) – e.g. Jul profit of HK$1.1bn reflects CCL prices in May-Jun, while price hikes in Jul-Aug will be reflected in Aug-Oct profit. Looking ahead, the Chairman is confident of HK$10bn earnings in 2026 (implying HK$7bn+ in 2H). Mgmt. believes price hikes are sustainable as the supply imbalance in glass fiber cloth remains structural, while industry is unlikely to mass-adopt domestic looms on low yields (and even higher costs due to yarn wastage). Meanwhile, end-customers like auto/smartphone OEMs face even tighter PCB supply and are proactively negotiating with CCL/material suppliers to secure sufficient supply, suggesting brands' higher willingness to absorb costs.

Better-than-expected diversification into high-end/AI

Besides a strong earnings trajectory in the traditional segment, we see KBL's progress in AI as better-than-expected. KBL is certified by six CCL customers for low-DK1/2 and T-glass, and is adding one more furnace for T-glass this year (four new furnaces in 2026 in total). Low-DK1 has reached high UTR/yield, while low-DK2/T-glass are targeted to ramp up to full UTR by year-end. Meanwhile, capacity for specialty glass fiber, high-end copper foil and M6+ CCL is fully booked in 2027, suggesting potentially successful diversification into the AI sector, a key to support valuation re-rating.

Raise estimates, PO to HK$65; reiterate Buy

We raise 2026E earnings by c.20% to reflect the delayed effect of CCL price hikes, and fine-tuning 2027-28E. Our lower revenue estimates for 2027-28E is due to a lower assumption for Thailand capacity (no meaningful demand uptick from PCB suppliers' Thailand facilities), while earnings are unchanged on higher GM. We lift our PO to HK$65 (13x 2H26-1H27E P/E; was 12x) from HK$53, with the higher multiple reflecting better high-end progress and improved investor confidence. Reiterate Buy.

Estimates (Dec) (HK$)	2024A	2025A	2026E	2027E	2028E
Net Income (Adjusted - mn)	1,326	2,442	10,023	19,393	22,003
EPS	0.425	0.780	3.15	6.10	6.93
EPS Change (YoY)	46.1%	83.5%	304.5%	93.5%	13.5%
Dividend / Share	0.62	0.68	1.60	3.09	3.51
Free Cash Flow / Share	0.70	0.43	1.15	4.57	6.58
Valuation (Dec)					
P/E	103.4x	56.3x	13.9x	7.2x	6.3x
Dividend Yield	1.4%	1.5%	3.6%	7.0%	8.0%
EV / EBITDA*	47.3x	39.5x	10.5x	5.6x	5.0x
Free Cash Flow Yield*	1.6%	1.0%	2.6%	10.3%	14.8%

* For full definitions of *iQmethod℠* measures, see page 8.

This research report provides general information only. No part of this report may be used or reproduced or quoted in any manner whatsoever in Taiwan by the press or other persons without the express written consent of BofA Securities.
>> Employed by a non-US affiliate of BofAS and is not registered/qualified as a research analyst under the FINRA rules.
Refer to "Other Important Disclosures" for information on certain BofA Securities entities that take responsibility for the information herein in particular jurisdictions.
BofA Securities does and seeks to do business with issuers covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.
Refer to important disclosures on page 9 to 11. Analyst Certification on page 6. Price Objective Basis/Risk on page 6.
13012845

28 August 2026

Equity

Key Changes

(HK$)	Previous	Current
Price Obj.	53.00	65.00
2026E EPS	2.67	3.15
2027E EPS	6.16	6.10
2028E EPS	7.01	6.93
2026E EBITDA (m)	11,179.9	13,618.6
2027E EBITDA (m)	25,108.2	25,309.4
2028E EBITDA (m)	28,735.6	28,806.8

Katherine Zhu >>
Research Analyst
Merrill Lynch (Hong Kong)
kexin.zhu@bofa.com

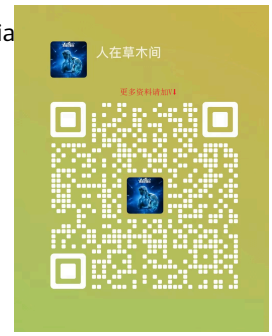
Robert Cheng >>
Research Analyst
Merrill Lynch (Taiwan)
robert.cheng@bofa.com

Doris Kao >>
Research Analyst
Merrill Lynch (Taiwan)
doris.kao@bofa.com

Stock Data

Price	43.94 HKD
Price Objective	65.00 HKD
Date Established	28-Aug-2026
Investment Opinion	C-1-7
52-Week Range	10.45 HKD-107.20 HKD
Mrkt Val / Shares Out (mn)	17,808 USD / 3,176.9
Market Value (mn)	139,594 HKD
Average Daily Value (mn)	677.58 USD
Free Float	33.3%
BofA Ticker / Exchange	KGBLF / HKG
Bloomberg / Reuters	1888 HK / 1888.HK
ROE (2026E)	50.4%
Net Dbt to Eqty (Dec-2025A)	15.7%

For abbrevia
Exhibit 6



iQprofile℠ Kingboard Laminates

Key Income Statement Data (Dec)	2024A	2025A	2026E	2027E	2028E
(HK$ Millions)					
Sales	18,541	20,400	37,909	59,750	68,014
Gross Profit	3,278	3,991	14,277	25,725	29,339
Sell General & Admin Expense	(1,192)	(1,289)	(1,586)	(1,664)	(2,007)
Operating Profit	2,086	2,702	12,690	24,061	27,332
Net Interest & Other Income	(351)	358	(233)	240	240
Associates	NA	NA	NA	NA	NA
Pretax Income	1,735	3,060	12,457	24,301	27,572
Tax (expense) / Benefit	(405)	(618)	(2,435)	(4,909)	(5,570)
Net Income (Adjusted)	1,326	2,442	10,023	19,393	22,003
Average Fully Diluted Shares Outstanding	3,120	3,132	3,177	3,177	3,177
Key Cash Flow Statement Data					
Net Income	1,326	2,442	10,023	19,393	22,003
Depreciation & Amortization	933	915	928	1,248	1,475
Change in Working Capital	(454)	(1,427)	(3,737)	(3,321)	(805)
Deferred Taxation Charge	NA	NA	NA	NA	NA
Other Adjustments, Net	903	230	452	0	0
Cash Flow from Operations	2,708	2,160	7,666	17,320	22,672
Capital Expenditure	(534)	(822)	(4,056)	(2,988)	(2,040)
(Acquisition) / Disposal of Investments	(84)	(148)	(704)	(176)	(44)
Other Cash Inflow / (Outflow)	(192)	0	(717)	0	0
Cash Flow from Investing	(810)	(970)	(5,477)	(3,163)	(2,084)
Shares Issue / (Repurchase)	NA	NA	NA	NA	NA
Cost of Dividends Paid	(499)	(1,934)	(2,123)	(5,011)	(9,696)
Cash Flow from Financing	(1,928)	(2,105)	1,186	(5,011)	(9,696)
Free Cash Flow	2,174	1,338	3,609	14,332	20,632
Net Debt	1,354	2,562	2,711	(6,434)	(17,326)
Change in Net Debt	NA	NA	NA	NA	NA
Key Balance Sheet Data					
Property, Plant & Equipment	6,921	7,122	9,575	11,314	11,879
Other Non-Current Assets	2,390	2,811	3,730	3,762	3,770
Trade Receivables	3,617	4,852	8,327	11,095	11,638
Cash & Equivalents	1,924	1,628	5,003	14,148	25,039
Other Current Assets	8,258	9,063	11,857	13,034	13,495
Total Assets	23,110	25,475	38,492	53,352	65,821
Long-Term Debt	1,615	637	1,228	1,228	1,228
Other Non-Current Liabilities	361	358	435	435	435
Short-Term Debt	1,663	3,552	6,486	6,486	6,486
Other Current Liabilities	4,101	4,561	6,966	7,446	7,608
Total Liabilities	7,740	9,108	15,115	15,595	15,757
Total Equity	15,370	16,367	23,376	37,758	50,064
Total Equity & Liabilities	23,110	25,475	38,492	53,352	65,821
iQmethod℠ **- Bus Performance***					
Return On Capital Employed	8.3%	10.8%	38.9%	49.6%	41.9%
Return On Equity	8.7%	15.4%	50.4%	63.4%	50.1%
Operating Margin	11.3%	13.2%	33.5%	40.3%	40.2%
EBITDA Margin	16.3%	17.7%	35.9%	42.4%	42.4%
iQmethod℠ **- Quality of Earnings***					
Cash Realization Ratio	2.0x	0.9x	0.8x	0.9x	1.0x
Asset Replacement Ratio	0.6x	0.9x	4.4x	2.4x	1.4x
Tax Rate (Reported)	23.4%	20.2%	19.5%	20.2%	20.2%
Net Debt-to-Equity Ratio	8.8%	15.7%	11.6%	-17.0%	-34.6%
Interest Cover	8.2x	16.8x	NM	NM	NM

Key Metrics

* For full definitions of *iQmethod*℠ measures, see page 8.

Company Sector

Electronics

Company Description

Kingboard Laminates (KBL), listed in 2006 following a spin-off from Kingboard Group, is the global largest traditional copper clad laminate (CCL) manufacturer and one of a few CCL vendors that are able to vertically integrate upstream materials including copper foil, glass fiber yarn, glass fiber cloth, epoxy resin etc. KBL is also trying to do more external sales of specialty glass fiber cloth, targeting AI server applications.

Investment Rationale

We have a Buy rating on Kingboard Laminates (KBL), on strong earnings expansion led by CCL price hikes especially under current tight supply of glass fiber cloth (key upstream material of CCL).

Stock Data

Price to Book Value	6.0x

Exhibit 1: 1H26 earnings reached HK$2.9bn (+91% HoH, +209% YoY)
1H26 results review

(HKD mn)	1H25	2H25	1H26E	HoH	YoY	BofAe	Diff (%)	Consensus	Diff (%)
Sales	**9,588**	**10,812**	**14,904**	38%	55%	**14,355**	3.8	**14,970**	-0.4
Gross profit	**1,763**	**2,228**	**4,580**	106%	160%	**4,248**	7.8	**3,952**	15.9
Gross margin (%)	*18.4%*	*20.6%*	*30.7%*	10.1 ppt	12.3 ppt	*29.6%*	1.1 ppt	*26.4%*	4.3 ppt
Operating Income	**1,151**	**1,551**	**3,868**	149%	236%	**3,530**	9.6	**3,022**	28.0
Operating margin (%)	*12.0%*	*14.3%*	*26.0%*	11.6 ppt	13.9 ppt	*24.6%*	1.4 ppt	*20.2%*	5.8 ppt
Pre-Tax Income	**1,171**	**1,888**	**3,515**	86%	200%	**3,650**	-3.7	**3,259**	7.8
Pre-tax margin (%)	*12.2%*	*17.5%*	*23.6%*	6.1 ppt	11.4 ppt	*25.4%*	-1.8 ppt	*21.8%*	1.8 ppt
Net income	**933**	**1,509**	**2,887**	91%	209%	**2,913**	-0.9	**2,568**	12.4
Net margin (%)	*9.7%*	*14.0%*	*19.4%*	5.4 ppt	9.6 ppt	*20.3%*	-0.9 ppt	*17.2%*	2.2 ppt
EPS (HKD)	**0.30**	**0.48**	**0.92**	91%	208%	**0.93**	-0.9	**0.82**	12.4

Source: Company data, BofA Global Research estimates, Bloomberg consensus

BofA GLOBAL RESEARCH

Exhibit 2: We lift 2026E earnings by c.20% while fine-tune 2027-28E
Earnings estimates change, 2026-27E

	2026E			2027E			2028E		
(HKD mm)	**New**	**Old**	**Diff (%)**	**New**	**Old**	**Diff (%)**	**New**	**Old**	**Diff (%)**
Total sales	**37,909**	**35,930**	5.5	**59,750**	**65,086**	-8.2	**68,014**	**74,434**	-8.6
Gross Profit	**14,277**	**11,789**	21.1	**25,725**	**25,733**	0.0	**29,339**	**29,481**	-0.5
Gross margin	*37.7%*	*32.8%*	4.8 ppt	*43.1%*	*39.5%*	3.5 ppt	*43.1%*	*39.6%*	3.5 ppt
Operating income	**12,690**	**10,252**	23.8	**24,061**	**23,926**	0.6	**27,332**	**27,283**	0.2
Operating margin	*33.5%*	*28.5%*	4.9 ppt	*40.3%*	*36.8%*	3.5 ppt	*40.2%*	*36.7%*	3.5 ppt
Pretax income	**12,457**	**10,492**	18.7	**24,301**	**24,166**	0.6	**27,572**	**27,523**	0.2
Pretax margin	*32.9%*	*29.2%*	3.7 ppt	*40.7%*	*37.1%*	3.5 ppt	*40.5%*	*37.0%*	3.6 ppt
Net income	**10,023**	**8,372**	19.7	**19,393**	**19,285**	0.6	**22,003**	**21,964**	0.2
Net margin	*26.4%*	*23.3%*	3.1 ppt	*32.5%*	*29.6%*	2.8 ppt	*32.3%*	*29.5%*	2.8 ppt
EPS (HKD)	**3.15**	**2.67**	18.0	**6.10**	**6.16**	-0.9	**6.93**	**7.01**	-1.3

Source: BofA Global Research estimates

BofA GLOBAL RESEARCH

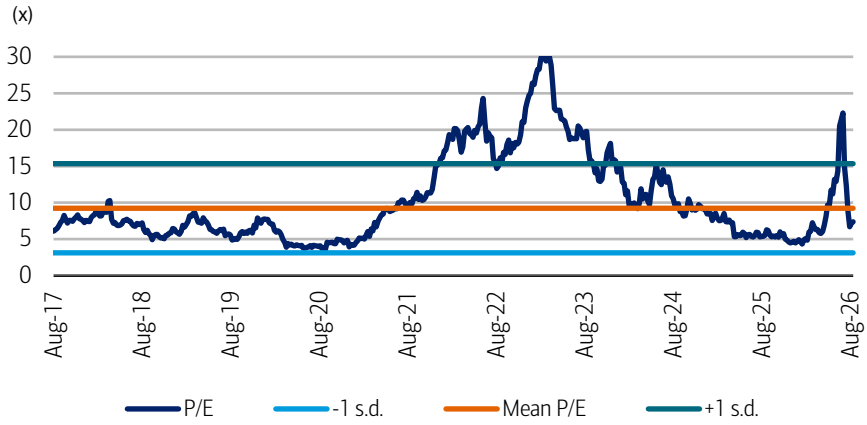
Exhibit 3: Our 2026-28E earnings are 24-58% above consensus
BofAe vs consensus, 2026-28E

	2026E			2027E			2028E		
(HKD mm)	BofAe	Consensus	Diff (%)	BofAe	Consensus	Diff (%)	BofAe	Consensus	Diff (%)
Total sales	**37,909**	**35,013**	8.3	**59,750**	**48,129**	24.1	**68,014**	**53,175**	27.9
Gross Profit	**14,277**	**12,010**	18.9	**25,725**	**17,881**	43.9	**29,339**	**20,076**	46.1
Gross margin	*37.7%*	*34.3%*	3.4 ppt	*43.1%*	*37.2%*	5.9 ppt	*43.1%*	*37.8%*	5.4 ppt
Operating income	**12,690**	**11,322**	12.1	**24,061**	**18,031**	33.4	**27,332**	**21,602**	26.5
Operating margin	*33.5%*	*32.3%*	1.1 ppt	*40.3%*	*37.5%*	2.8 ppt	*40.2%*	*40.6%*	-0.4 ppt
Pretax income	**12,457**	**11,108**	12.1	**24,301**	**17,155**	41.7	**27,572**	**19,485**	41.5
Pretax margin	*32.9%*	*31.7%*	1.1 ppt	*40.7%*	*35.6%*	5.0 ppt	*40.5%*	*36.6%*	3.9 ppt
Net income	**10,023**	**8,079**	24.1	**19,393**	**12,452**	55.7	**22,003**	**13,973**	57.5
Net margin	*26.4%*	*23.1%*	3.4 ppt	*32.5%*	*25.9%*	6.6 ppt	*32.3%*	*26.3%*	6.1 ppt
EPS (HKD)	**3.15**	**2.54**	24.1	**6.10**	**3.92**	55.7	**6.93**	**4.40**	57.5

Source: Company data, BofA Global Research estimates

BofA GLOBAL RESEARCH

Exhibit 4: Kingboard Laminates trades at 9x 1-year forward P/E, below historical average
Kingboard Laminates's 1-year forward P/E with -1/+1 standard deviation



Source: Bloomberg, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 5: We model 48% earnings CAGR in 2024-28E
Kingboard Laminatesl's semi-annual income statement, 2024-28E

HKDmn	1H24	2H24	1H25	2H25	1H26	2H26E	1H27E	2H27E	1H28E	2H28E	2024	2025	2026E	2027E	2028E
Sales	8,638	9,903	9,588	10,812	14,904	23,005	27,641	32,109	33,229	34,785	18,541	20,400	37,909	59,750	68,014
Gross profit	1,704	1,574	1,763	2,228	4,580	9,696	11,786	13,939	14,371	14,968	3,278	3,991	14,277	25,725	29,339
OP profit	1,117	970	1,151	1,551	3,868	8,822	10,957	13,105	13,407	13,925	2,086	2,702	12,690	24,061	27,332
Pretax profit	957	778	1,171	1,888	3,515	8,942	11,077	13,225	13,527	14,045	1,735	3,060	12,457	24,301	27,572
Net income	728	598	933	1,509	2,887	7,136	8,839	10,553	10,795	11,208	1,326	2,442	10,023	19,393	22,003
EPS (HKD)	0.23	0.19	0.30	0.48	0.91	2.25	2.78	3.32	3.40	3.53	0.43	0.78	3.15	6.10	6.93
Margin															
Gross margin	19.7%	15.9%	18.4%	20.6%	30.7%	42.1%	42.6%	43.4%	43.2%	43.0%	17.7%	19.6%	37.7%	43.1%	43.1%
OP margin	12.9%	9.8%	12.0%	14.3%	26.0%	38.3%	39.6%	40.8%	40.3%	40.0%	11.3%	13.2%	33.5%	40.3%	40.2%
Pretax margin	11.1%	7.9%	12.2%	17.5%	23.6%	38.9%	40.1%	41.2%	40.7%	40.4%	9.4%	15.0%	32.9%	40.7%	40.5%
Net margin	8.4%	6.0%	9.7%	14.0%	19.4%	31.0%	32.0%	32.9%	32.5%	32.2%	7.2%	12.0%	26.4%	32.5%	32.3%
HoH															
Sales	0%	15%	-3%	13%	38%	54%	20%	16%	3%	5%					
Gross profit	24%	-8%	12%	26%	106%	112%	22%	18%	3%	4%					
OP profit	45%	-13%	19%	35%	149%	128%	24%	20%	2%	4%					
Pretax profit	53%	-19%	51%	61%	86%	154%	24%	19%	2%	4%					
Net income	50%	-18%	56%	62%	91%	147%	24%	19%	2%	4%					
YoY															
Sales	7%	15%	11%	9%	55%	113%	85%	40%	20%	8%	11%	10%	86%	58%	14%
Gross profit	31%	14%	3%	42%	160%	335%	157%	44%	22%	7%	22%	22%	258%	80%	14%
OP profit	63%	26%	3%	60%	236%	469%	183%	49%	22%	6%	43%	30%	370%	90%	14%
Pretax profit	69%	24%	22%	143%	200%	374%	215%	48%	22%	6%	45%	76%	307%	95%	13%
Net income	72%	23%	28%	152%	209%	373%	206%	48%	22%	6%	46%	84%	310%	93%	13%

Source: Company data, BofA Global Research estimates

BofA GLOBAL RESEARCH

Exhibit 6: Summary of abbreviations used in this report
Abbreviations

Acronym	
AI	Artificial Intelligence
ASP	Average Selling Price
ASIC	Application-specific Integrated Circuit
BOM	Bills of Materials
CCL	Copper Clad Laminate
CTE	Coefficient of Thermal Expansion
CSP	Cloud Service Provider
Dk	Dielectric Constant
Df	Dissipation Factor

Exhibit 6: Summary of abbreviations used in this report
Abbreviations

Acronym	
FR	Flame Retardant
HVLP	Hyper Very Low Profile
Mgmt	Management
MLCC	Multi-Layer Ceramic Capacitor
PCB	Printed Circuit Board
PPO	Polyphenylene Oxide
PPE	Polyphenylene Ether
PTFE	Polytetrafluoroethylene
S/D	Supply/Demand
TPU	Tensor Processing Unit
TBBA	Tetrabromobisphenol
RTF	Reverse-Treated Foil
Rz	Roughness
UTR	Utilization Rate

Source: BofA Global Research

BofA GLOBAL RESEARCH

Price objective basis & risk

Kingboard Laminates (KGBLF)
We set our PO at HK$65, on 13x 2H26-1H27E P/E. 13x is around +0.5SD of KBL's historical trading range, and matches with its last earnings upcycle in 2021 (led by e-glass price hike) while also reflects rising mix from high-end AI-related deliveries.

Downside risks: (1) slower-than-expected CCL price hike, (2) better-than-expected industry supply of upstream materials esp. cloth, (3) slower-than-expected AI server demand, and (4) slower-than-expected external glass fiber cloth sales.

Upside risks: (1) stronger-than-expected CCL price hike, (2) slower-than-expected industry supply of upstream materials esp. cloth, (3) stronger-than-expected AI server demand, and (4) faster-than-expected external glass fiber cloth sales.

Analyst Certification

I, Katherine Zhu, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

Special Disclosures

Information on securities which are listed on the exchanges where ML Securities (Taiwan) Limited is not permitted to trade or solicit trades for clients is for informational purposes only and is not a recommendation or a solicitation to trade such securities. ML Securities (Taiwan) Limited will not execute transactions for nor accept orders from clients to trade such securities. Foreign investment in Taiwan securities is regulated and restricted. Currently, foreign investment in Taiwan securities is permitted by investment through: (1) global depository receipts, (2) convertible bonds, (3) mutual funds issued offshore of Taiwan, and (4) a special foreign institutional investors (FINIs) and foreign individual investors (FIDIs) program supervised by the Taiwan SFB whereunder FINIs/FIDIs may apply for investment ID to invest in Taiwan securities by registration with Taiwan Stock Exchange. FINIs will additionally need consent from the foreign exchange authority, ie, the Central Bank of China. In addition to the limitations above, various industry-specific percentage-based limitations on foreign ownership of Taiwan companies (and in some cases prohibitions) may apply. Investments are subject to exchange rate and currency conversion restrictions and risks. Dividends and interest earned by foreign investors' Taiwan securities/instruments are generally subject to a 20% withholding tax. Ordinary shares are not available to ML private client accounts in the U.S.

This report is distributed in Taiwan by Merrill Lynch Securities (Taiwan) Limited, which is regulated by the Taiwan SFB.

APR - Technology Hardware Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	AAC Technologies	AACAF	2018 HK	Katherine Zhu
	Advantech	ADTEF	2395 TT	Robert Cheng
	Asia Vital Components	AVMPF	3017 TT	Doris Kao
	Asustek	AKCPF	2357 TT	Robert Cheng
	BizLink	BIZLF	3665 TT	Doris Kao
	Chenbro	CEOMF	8210 TT	Doris Kao
	Cowell	CWLLF	1415 HK	Katherine Zhu
	Crystal-Optech	XMKAF	002273 CH	Katherine Zhu

APR - Technology Hardware Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	Delta Electronics (Thailand)	XLETF	DELTA TB	Suppapong Iemkongaek, CFA, CMT
	Delta Electronics Inc.	DLTEF	2308 TT	Robert Cheng
	Duksan Neolux	XDSXF	213420 KS	Simon Woo, CFA
	Dynamic Holding	XLHCF	3715 TT	Mike Yang
	Elite Material	ETMCF	2383 TT	Mike Yang
	Foxconn Industrial Internet	XDAZF	601138 CH	Robert Cheng
	Goertek	XGKCF	002241 CH	Katherine Zhu
	Gold Circuit	GOCCF	2368 TT	Doris Kao
	Hana Microelectronics	XHNNF	HANA TB	Suppapong Iemkongaek, CFA, CMT
	Hon Hai Precision Industry	HNHAF	2317 TT	Robert Cheng
	Huaqin	XHUAF	603296 CH	Katherine Zhu
	Huaqin	XPEZF	3296 HK	Katherine Zhu
	ISU Petasys	IPTYF	007660 KS	Matt Shin
	Jentech	XVFSF	3653 TT	Doris Kao
	King Slide	KGSLF	2059 TT	Doris Kao
	Kingboard Laminates	KGBLF	1888 HK	Katherine Zhu
	Kinsus	KNSUF	3189 TT	Mike Yang
	Largan Precision	LGANF	3008 TT	Robert Cheng
	Lenovo Group	LNVGF	992 HK	Robert Cheng
	Lenovo Group	LNVGY	LNVGY US	Robert Cheng
	Lens Tech	XLTVF	6613 HK	Katherine Zhu
	LG CNS	XLGLF	064400 KS	Simon Woo, CFA
	LG Electronics	LGEAF	066570 KS	Simon Woo, CFA
	LG Innotek	XLGQF	011070 KS	Simon Woo, CFA
	Lotes	ZYZTF	3533 TT	Doris Kao
	Luxshare	XNJQF	002475 CH	Robert Cheng
	Netweb Technologies	XNTZF	NETWEB IN	Jatin Kalra, CFA
	NYPCB	NANYF	8046 TT	Mike Yang
	Quanta Computer	QUCPF	2382 TT	Robert Cheng
	Samsung Electro-Mechanics	SMSGF	009150 KS	Simon Woo, CFA
	Samsung SDI	SSDIF	006400 KS	Simon Woo, CFA
	Samsung SDS	XWPBF	018260 KS	Simon Woo, CFA
	Shennan Circuits	XAMKF	002916 CH	Katherine Zhu
	Taiwan Union Technology Corporation	TWUNF	6274 TT	Mike Yang
	Unimicron	UMCRF	3037 TT	Mike Yang
	Universal Display	OLED	OLED US	Simon Woo, CFA
	Victory Giant	XENEF	300476 CH	Katherine Zhu
	Wistron	WICOF	3231 TT	Doris Kao
	Wiwynn	XWIQF	6669 TT	Robert Cheng
	Xiaomi Corporation	XIACF	1810 HK	Robert Cheng
	Yageo	YGEQF	2327 TT	Robert Cheng
	Zhen Ding Tech	XFAGF	4958 TT	Doris Kao
	Zhongji Innolight	XZICF	300308 CH	Katherine Zhu
NEUTRAL				
	Auras Technology	AUTCF	3324 TT	Doris Kao
	BYD Electronic	BYDIF	285 HK	Katherine Zhu
	DS Precision	XBASF	002384 CH	Katherine Zhu
	E Ink Holdings	PVWIF	8069 TT	Doris Kao
	Lite-On Tech	LOTZF	2301 TT	Doris Kao
	Sunny Optical	SNPTF	2382 HK	Katherine Zhu
UNDERPERFORM				
	Acer	ASIYF	2353 TT	Robert Cheng
	Catcher Tech	CHERF	2474 TT	Robert Cheng
	Compal Electron	XLCPF	2324 TT	Doris Kao
	Everwin Precision	XSHZF	300115 CH	Katherine Zhu
	Genius Electronic Optical	GNSEF	3406 TT	Robert Cheng
	Lens Tech	XLTGF	300433 CH	Katherine Zhu
	LG Display	LPHLF	034220 KS	Simon Woo, CFA
	LG Display-ADR	LPL	LPL US	Simon Woo, CFA
	Pegatron	PGTRF	4938 TT	Robert Cheng
	Sanan Opto	XEQYF	600703 CH	Katherine Zhu
	Seoul Semiconductor	SLSOF	046890 KS	Simon Woo, CFA
	Shengyi	DGUNF	600183 CH	Mike Yang
	Sunway Communications	XWSVF	300136 CH	Katherine Zhu

APR - Technology Hardware Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	Transsion	XCINF	688036 CH	Robert Cheng
	ZTE Corporation	SHZZF	000063 CH	Katherine Zhu
	ZTE Corporation	ZTCOF	763 HK	Katherine Zhu

iQmethod℠ Measures Definitions

Business Performance	Numerator	Denominator
Return On Capital Employed	NOPAT = (EBIT + Interest Income) × (1 − Tax Rate) + Goodwill Amortization	Total Assets − Current Liabilities + ST Debt + Accumulated Goodwill Amortization
Return On Equity	Net Income	Shareholders' Equity
Operating Margin	Operating Profit	Sales
Earnings Growth	Expected 5 Year CAGR From Latest Actual	N/A
Free Cash Flow	Cash Flow From Operations − Total Capex	N/A

Quality of Earnings	Numerator	Denominator
Cash Realization Ratio	Cash Flow From Operations	Net Income
Asset Replacement Ratio	Capex	Depreciation
Tax Rate	Tax Charge	Pre-Tax Income
Net Debt-To-Equity Ratio	Net Debt = Total Debt − Cash & Equivalents	Total Equity
Interest Cover	EBIT	Interest Expense

Valuation Toolkit	Numerator	Denominator
Price / Earnings Ratio	Current Share Price	Diluted Earnings Per Share (Basis As Specified)
Price / Book Value	Current Share Price	Shareholders' Equity / Current Basic Shares
Dividend Yield	Annualised Declared Cash Dividend	Current Share Price
Free Cash Flow Yield	Cash Flow From Operations − Total Capex	Market Cap = Current Share Price × Current Basic Shares
Enterprise Value / Sales	EV = Current Share Price × Current Shares + Minority Equity + Net Debt + Other LT Liabilities	Sales
EV / EBITDA	Enterprise Value	Basic EBIT + Depreciation + Amortization

iQmethod℠ is the set of BofA Global Research standard measures that serve to maintain global consistency under three broad headings: Business Performance, Quality of Earnings, and validations. The key features of iQmethod are: A consistently structured, detailed, and transparent methodology. Guidelines to maximize the effectiveness of the comparative valuation process, and to identify some common pitfalls.

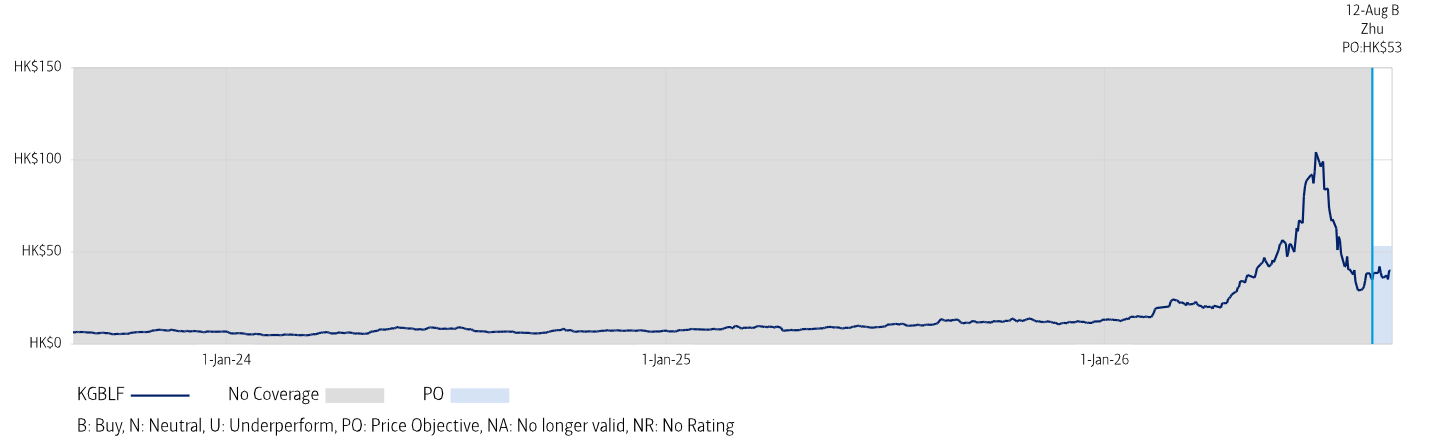
iQdatabase® is our real-time global research database that is sourced directly from our equity analysts' earnings models and includes forecasted as well as historical data for income statements, balance sheets, and cash flow statements for companies covered by BofA Global Research.

iQprofile℠, *iQmethod℠* are service marks of Bank of America Corporation. *iQdatabase®* is a registered service mark of Bank of America Corporation.

Disclosures

Important Disclosures

Kingboard Laminates (KGBLF) Price Chart



B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

The Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark grey shading indicates the security is restricted with the opinion suspended. Medium grey shading indicates the security is under review with the opinion withdrawn. Light grey shading indicates the security is not covered. Chart is current as of a date no more than one trading day prior to the date of the report.

Equity Investment Rating Distribution: Electronics Group (as of 30 Jun 2026)

Coverage Universe	Count	Percent	Inv. Banking Relationships [R1]	Count	Percent
Buy	34	55.74%	Buy	16	47.06%
Hold	10	16.39%	Hold	3	30.00%
Sell	17	27.87%	Sell	6	35.29%

Equity Investment Rating Distribution: Global Group (as of 30 Jun 2026)

Coverage Universe	Count	Percent	Inv. Banking Relationships [R1]	Count	Percent
Buy	1987	56.11%	Buy	1190	59.89%
Hold	797	22.51%	Hold	496	62.23%
Sell	757	21.38%	Sell	391	51.65%

[R1] Issuers that were investment banking clients of BofA Securities or one of its affiliates within the past 12 months. For purposes of this Investment Rating Distribution, the coverage universe includes only stocks. A stock rated Neutral is included as a Hold, and a stock rated Underperform is included as a Sell.

FUNDAMENTAL EQUITY OPINION KEY: Opinions include a Volatility Risk Rating, an Investment Rating and an Income Rating. VOLATILITY RISK RATINGS, indicators of potential price fluctuation, are: A - Low, B - Medium and C - High. INVESTMENT RATINGS reflect the analyst's assessment of both a stock's absolute total return potential as well as its attractiveness for investment relative to other stocks within its Coverage Cluster (defined below). Our investment ratings are: 1 - Buy stocks are expected to have a total return of at least 10% and are the most attractive stocks in the coverage cluster; 2 - Neutral stocks are expected to remain flat or increase in value and are less attractive than Buy rated stocks and 3 - Underperform stocks are the least attractive stocks in a coverage cluster. An investment rating of 6 (No Rating) indicates that a stock is no longer trading on the basis of fundamentals. Analysts assign investment ratings considering, among other things, the 0-12 month total return expectation for a stock and the firm's guidelines for ratings dispersions (shown in the table below). The current price objective for a stock should be referenced to better understand the total return expectation at any given time. The price objective reflects the analyst's view of the potential price appreciation (depreciation).

Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster[R2]
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

[R2] Ratings dispersions may vary from time to time where BofA Global Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

INCOME RATINGS, indicators of potential cash dividends, are: 7 - same/higher (dividend considered to be secure), 8 - same/lower (dividend not considered to be secure) and 9 - pays no cash dividend. *Coverage Cluster* is comprised of stocks covered by a single analyst or two or more analysts sharing a common industry, sector, region or other classification(s). A stock's coverage cluster is included in the most recent BofA Global Research report referencing the stock.

Price Charts for the securities referenced in this research report are available on the Price Charts website, or call 1-800-MERRILL to have them mailed.
BofAS or an affiliate was a manager of a public offering of securities of this issuer within the last 12 months: Kingboard Laminates.
The issuer is or was, within the last 12 months, an investment banking client of BofAS and/or one or more of its affiliates: Kingboard Laminates.
The issuer is or was, within the last 12 months, a non-securities business client of BofAS and/or one or more of its affiliates: Kingboard Laminates.
In the US, retail sales and/or distribution of this report may be made only in states where these securities are exempt from registration or have been qualified for sale: Kingboard Laminates.
BofAS or an affiliate has received compensation for investment banking services from this issuer within the past 12 months: Kingboard Laminates.
BofAS or an affiliate expects to receive or intends to seek compensation for investment banking services from this issuer or an affiliate of the issuer within the next three months: Kingboard Laminates.
The issuer is or was, within the last 12 months, a securities business client (non-investment banking) of BofAS and/or one or more of its affiliates: Kingboard Laminates.
BofA Global Research personnel (including the analyst(s) responsible for this report) receive compensation based upon, among other factors, the overall profitability of Bank of America

Corporation, including profits derived from investment banking. The analyst(s) responsible for this report may also receive compensation based upon, among other factors, the overall profitability of the Bank's sales and trading businesses relating to the class of securities or financial instruments for which such analyst is responsible.

Other Important Disclosures

From time to time research analysts conduct site visits of covered issuers. BofA Global Research policies prohibit research analysts from accepting payment or reimbursement for travel expenses from the issuer for such visits.
Prices are indicative and for information purposes only. Except as otherwise stated in the report, for any recommendation in relation to an equity security, the price referenced is the publicly traded price of the security as of close of business on the day prior to the date of the report or, if the report is published during intraday trading, the price referenced is indicative of the traded price as of the date and time of the report and in relation to a debt security (including equity preferred and CDS), prices are indicative as of the date and time of the report and are from various sources including BofA Securities trading desks.
The date and time of completion of the production of any recommendation in this report shall be the date and time of dissemination of this report as recorded in the report timestamp.

Recipients who are not institutional investors or market professionals should seek the advice of their independent financial advisor before considering information in this report in connection with any investment decision, or for a necessary explanation of its contents.
Officers of BofAS or one or more of its affiliates (other than research analysts) may have a financial interest in securities of the issuer(s) or in related investments.
Refer to BofA Global Research policies relating to conflicts of interest.
"BofA Securities" includes BofA Securities, Inc. ("BofAS") and its affiliates. Investors should contact their BofA Securities representative or Merrill Global Wealth Management financial advisor if they have questions concerning this report or concerning the appropriateness of any investment idea described herein for such investor. "BofA Securities" is a global brand for BofA Global Research.
Information relating to Non-US affiliates of BofA Securities and Distribution of Affiliate Research Reports:
BofAS and/or Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPF&S") may in the future distribute, information of the following non-US affiliates in the US (short name: legal name, regulator): Merrill Lynch (South Africa): Merrill Lynch South Africa (Pty) Ltd., regulated by the Financial Sector Conduct Authority; MLI (UK): Merrill Lynch International, regulated by the Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA); BofASE (France): BofA Securities Europe SA is authorized by the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers (AMF). BofA Securities Europe SA ("BofASE") with registered address at 51, rue La Boétie, 75008 Paris is registered under no 842 602 690 RCS Paris. In accordance with the provisions of French Code Monétaire et Financier (Monetary and Financial Code), BofASE is an établissement de crédit et d'investissement (credit and investment institution) that is authorised and supervised by the European Central Bank and the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers. BofASE's share capital can be found at www.bofaml.com/BofASEdisclaimer; BofA Europe (Milan): Bank of America Europe Designated Activity Company, Milan Branch, regulated by the Bank of Italy, the European Central Bank (ECB) and the Central Bank of Ireland (CBI); BofA Europe (Frankfurt): Bank of America Europe Designated Activity Company, Frankfurt Branch regulated by BaFin, the ECB and the CBI; BofA Europe (Zurich): Bank of America Europe Designated Activity Company, Zurich Branch, regulated by the Swiss Financial Market Supervisory Authority FINMA, the ECB and CBI; BofA Europe (Madrid): Bank of America Europe Designated Activity Company, Sucursal en España, regulated by the Bank of Spain, the ECB and the CBI; Merrill Lynch (Australia): Merrill Lynch Equities (Australia) Limited, regulated by the Australian Securities and Investments Commission; Merrill Lynch (Hong Kong): Merrill Lynch (Asia Pacific) Limited, regulated by the Hong Kong Securities and Futures Commission (HKSFC); Merrill Lynch (Singapore): Merrill Lynch (Singapore) Pte Ltd, regulated by the Monetary Authority of Singapore (MAS); Merrill Lynch (Canada): Merrill Lynch Canada Inc, regulated by the Canadian Investment Regulatory Organization; Merrill Lynch (Mexico): Merrill Lynch Mexico, SA de CV, Casa de Bolsa, regulated by the Comisión Nacional Bancaria y de Valores; BofAS Japan: BofA Securities Japan Co., Ltd., regulated by the Financial Services Agency; Merrill Lynch (Seoul): Merrill Lynch International, LLC Seoul Branch, regulated by the Financial Supervisory Service; Merrill Lynch (Taiwan): Merrill Lynch Securities (Taiwan) Ltd., regulated by the Securities and Futures Bureau; BofAS India: BofA Securities India Limited, regulated by the Securities and Exchange Board of India (SEBI); Merrill Lynch (Israel): Merrill Lynch Israel Limited, regulated by Israel Securities Authority; Merrill Lynch (DIFC): Merrill Lynch International (DIFC Branch), regulated by the Dubai Financial Services Authority (DFSA); Merrill Lynch (Brazil): Merrill Lynch S.A. Corretora de Títulos e Valores Mobiliários, regulated by Comissão de Valores Mobiliários; Merrill Lynch KSA Company: Merrill Lynch Kingdom of Saudi Arabia Company, regulated by the Capital Market Authority.
This information: has been approved for publication and is distributed in the United Kingdom (UK) to professional clients and eligible counterparties (as each is defined in the rules of the FCA and the PRA) by MLI (UK), which is authorized by the PRA and regulated by the FCA and the PRA - details about the extent of our regulation by the FCA and PRA are available from us on request; has been approved for publication and is distributed in the European Economic Area (EEA) by BofASE (France), which is authorized by the ACPR and regulated by the ACPR and the AMF; has been considered and distributed in Japan by BofAS Japan, a registered securities dealer under the Financial Instruments and Exchange Act in Japan, or its permitted affiliates; is issued and distributed in Hong Kong by Merrill Lynch (Hong Kong) which is regulated by HKSFC; is issued and distributed in Taiwan by Merrill Lynch (Taiwan); is issued and distributed in India by BofAS India; and is issued and distributed in Singapore to institutional investors and/or accredited investors (each as defined under the Financial Advisers Regulations) by Merrill Lynch (Singapore) (Company Registration No 198602883D). Merrill Lynch (Singapore) is regulated by MAS. Merrill Lynch Equities (Australia) Limited (ABN 65 006 276 795), AFS License 235132 (MLEA) distributes this information in Australia only to 'Wholesale' clients as defined by s.761G of the Corporations Act 2001. With the exception of Bank of America N.A., Australia Branch, neither MLEA nor any of its affiliates involved in preparing this information is an Authorised Deposit-Taking Institution under the Banking Act 1959 nor regulated by the Australian Prudential Regulation Authority. No approval is required for publication or distribution of this information in Brazil and its local distribution is by Merrill Lynch (Brazil) in accordance with applicable regulations. Merrill Lynch (DIFC) is authorized and regulated by the DFSA. Information prepared and issued by Merrill Lynch (DIFC) is done so in accordance with the requirements of the DFSA conduct of business rules. BofA Europe (Frankfurt) distributes this information in Germany and is regulated by BaFin, the ECB and the CBI. BofA Securities entities, including BofA Europe and BofASE (France), may outsource/delegate the marketing and/or provision of certain research services or aspects of research services to other branches or members of the BofA Securities group. You may be contacted by a different BofA Securities entity acting for and on behalf of your service provider where permitted by applicable law. This does not change your service provider. Please refer to the Electronic Communications Disclaimers for further information.
This information has been prepared and issued by BofAS and/or one or more of its non-US affiliates. The author(s) of this information may not be licensed to carry on regulated activities in your jurisdiction and, if not licensed, do not hold themselves out as being able to do so. BofAS and/or MLPF&S is the distributor of this information in the US and accepts full responsibility for information distributed to BofAS and/or MLPF&S clients in the US by its non-US affiliates. Any US person receiving this information and wishing to effect any transaction in any security discussed herein should do so through BofAS and/or MLPF&S and not such foreign affiliates. Hong Kong recipients of this information should contact Merrill Lynch (Asia Pacific) Limited in respect of any matters relating to dealing in securities or provision of specific advice on securities or any other matters arising from, or in connection with, this information. Singapore recipients of this information should contact Merrill Lynch (Singapore) Pte Ltd in respect of any matters arising from, or in connection with, this information. For clients that are not accredited investors, expert investors or institutional investors Merrill Lynch (Singapore) Pte Ltd accepts full responsibility for the contents of this information distributed to such clients in Singapore.
General Investment Related Disclosures:
Taiwan Readers: Neither the information nor any opinion expressed herein constitutes an offer or a solicitation of an offer to transact in any securities or other financial instrument. No part of this report may be used or reproduced or quoted in any manner whatsoever in Taiwan by the press or any other person without the express written consent of BofA Securities.
This document provides general information only, and has been prepared for, and is intended for general distribution to, BofA Securities clients. Neither the information nor any opinion expressed constitutes an offer or an invitation to make an offer, to buy or sell any securities or other financial instrument or any derivative related to such securities or instruments (e.g., options, futures, warrants, and contracts for differences). This document is not intended to provide personal investment advice and it does not take into account the specific investment objectives, financial situation and the particular needs of, and is not directed to, any specific person(s). This document and its content do not constitute, and should not be considered to constitute, investment advice for purposes of ERISA, the US tax code, the Investment Advisers Act or otherwise. Investors should seek financial advice regarding the appropriateness of investing in financial instruments and implementing investment strategies discussed or recommended in this document and should understand that statements regarding future prospects may not be realized. Any decision to purchase or subscribe for securities in any offering must be based solely on existing public information on such security or the information in the prospectus or other offering document issued in connection with such offering, and not on this document.
Securities and other financial instruments referred to herein, or recommended, offered or sold by BofA Securities, are not insured by the Federal Deposit Insurance Corporation and are not deposits or other obligations of any insured depository institution (including, Bank of America, N.A.). Investments in general and, derivatives, in particular, involve numerous risks, including, among others, market risk, counterparty default risk and liquidity risk. No security, financial instrument or derivative is suitable for all investors. Digital assets are extremely speculative, volatile

and are largely unregulated. In some cases, securities and other financial instruments may be difficult to value or sell and reliable information about the value or risks related to the security or financial instrument may be difficult to obtain. Investors should note that income from such securities and other financial instruments, if any, may fluctuate and that price or value of such securities and instruments may rise or fall and, in some cases, investors may lose their entire principal investment. Past performance is not necessarily a guide to future performance. Levels and basis for taxation may change.

This report may contain a short-term trading idea or recommendation, which highlights a specific near-term catalyst or event impacting the issuer or the market that is anticipated to have a short-term price impact on the equity securities of the issuer. Short-term trading ideas and recommendations are different from and do not affect a stock's fundamental equity rating, which reflects both a longer term total return expectation and attractiveness for investment relative to other stocks within its Coverage Cluster. Short-term trading ideas and recommendations may be more or less positive than a stock's fundamental equity rating.

BofA Securities is aware that the implementation of the ideas expressed in this report may depend upon an investor's ability to "short" securities or other financial instruments and that such action may be limited by regulations prohibiting or restricting "shortselling" in many jurisdictions. Investors are urged to seek advice regarding the applicability of such regulations prior to executing any short idea contained in this report.

Foreign currency rates of exchange may adversely affect the value, price or income of any security or financial instrument mentioned herein. Investors in such securities and instruments, including ADRs, effectively assume currency risk.

BofAS or one of its affiliates is a regular issuer of traded financial instruments linked to securities that may have been recommended in this report. BofAS or one of its affiliates may, at any time, hold a trading position (long or short) in the securities and financial instruments discussed in this report.

BofA Securities, through business units other than BofA Global Research, may have issued and may in the future issue trading ideas or recommendations that are inconsistent with, and reach different conclusions from, the information presented herein. Such ideas or recommendations may reflect different time frames, assumptions, views and analytical methods of the persons who prepared them, and BofA Securities is under no obligation to ensure that such other trading ideas or recommendations are brought to the attention of any recipient of this information.

In the event that the recipient received this information pursuant to a contract between the recipient and BofAS for the provision of research services for a separate fee, and in connection therewith BofAS may be deemed to be acting as an investment adviser, such status relates, if at all, solely to the person with whom BofAS has contracted directly and does not extend beyond the delivery of this report (unless otherwise agreed specifically in writing by BofAS). If such recipient uses the services of BofAS in connection with the sale or purchase of a security referred to herein, BofAS may act as principal for its own account or as agent for another person. BofAS is and continues to act solely as a broker-dealer in connection with the execution of any transactions, including transactions in any securities referred to herein.

Copyright and General Information:

Copyright 2026 Bank of America Corporation. All rights reserved. iQdatabase® is a registered service mark of Bank of America Corporation. This information is prepared for the use of BofA Securities clients and may not be redistributed, retransmitted or disclosed, in whole or in part, or in any form or manner, without the express written consent of BofA Securities. This document and its content is provided solely for informational purposes and cannot be used for training or developing artificial intelligence (AI) models or as an input in any AI application (collectively, an AI tool). Any attempt to utilize this document or any of its content in connection with an AI tool without explicit written permission from BofA Global Research is strictly prohibited. BofA Global Research utilizes AI, including machine learning and other technologies, to enhance the services we provide to our clients. These technologies assist our analysts in various aspects of their work, including but not limited to data analysis, content extraction, content creation, data aggregation and summarization and identifying relevant information from diverse sources. All AI-driven processes are subject to review by BofA Global Research employees. BofA Global Research information is distributed simultaneously to internal and client websites and other portals by BofA Securities and is not publicly-available material. Any unauthorized use or disclosure is prohibited. Receipt and review of this information constitutes your agreement not to redistribute, retransmit, or disclose to others the contents, opinions, conclusion, or information contained herein (including any investment recommendations, estimates or price targets) without first obtaining express permission from an authorized officer of BofA Securities.

Materials prepared by BofA Global Research personnel are based on public information. Facts and views presented in this material have not been reviewed by, and may not reflect information known to, professionals in other business areas of BofA Securities, including investment banking personnel. BofA Securities has established information barriers between BofA Global Research and certain business groups. As a result, BofA Securities does not disclose certain client relationships with, or compensation received from, such issuers. To the extent this material discusses any legal proceeding or issues, it has not been prepared as nor is it intended to express any legal conclusion, opinion or advice. Investors should consult their own legal advisers as to issues of law relating to the subject matter of this material. BofA Global Research personnel's knowledge of legal proceedings in which any BofA Securities entity and/or its directors, officers and employees may be plaintiffs, defendants, co-defendants or co-plaintiffs with or involving issuers mentioned in this material is based on public information. Facts and views presented in this material that relate to any such proceedings have not been reviewed by, discussed with, and may not reflect information known to, professionals in other business areas of BofA Securities in connection with the legal proceedings or matters relevant to such proceedings.

This information has been prepared independently of any issuer of securities mentioned herein and not in connection with any proposed offering of securities or as agent of any issuer of any securities. None of BofAS any of its affiliates or their research analysts has any authority whatsoever to make any representation or warranty on behalf of the issuer(s). BofA Global Research policy prohibits research personnel from disclosing a recommendation, investment rating, or investment thesis for review by an issuer prior to the publication of a research report containing such rating, recommendation or investment thesis.

Any information relating to sustainability in this material is limited as discussed herein and is not intended to provide a comprehensive view on any sustainability claim with respect to any issuer or security.

Any information relating to the tax status of financial instruments discussed herein is not intended to provide tax advice or to be used by anyone to provide tax advice. Investors are urged to seek tax advice based on their particular circumstances from an independent tax professional.

The information herein (other than disclosure information relating to BofA Securities and its affiliates) was obtained from various sources and we do not guarantee its accuracy. This information may contain links to third-party websites. BofA Securities is not responsible for the content of any third-party website or any linked content contained in a third-party website. Content contained on such third-party websites is not part of this information and is not incorporated by reference. The inclusion of a link does not imply any endorsement by or any affiliation with BofA Securities. Access to any third-party website is at your own risk, and you should always review the terms and privacy policies at third-party websites before submitting any personal information to them. BofA Securities is not responsible for such terms and privacy policies and expressly disclaims any liability for them.

All opinions, projections and estimates constitute the judgment of the author as of the date of publication and are subject to change without notice. Prices also are subject to change without notice. BofA Securities is under no obligation to update this information and BofA Securities ability to publish information on the subject issuer(s) in the future is subject to applicable quiet periods. You should therefore assume that BofA Securities will not update any fact, circumstance or opinion contained herein.

Subject to the quiet period applicable under laws of the various jurisdictions in which we distribute research reports and other legal and BofA Securities policy-related restrictions on the publication of research reports, fundamental equity reports are produced on a regular basis as necessary to keep the investment recommendation current.

Certain outstanding reports or investment opinions relating to securities, financial instruments and/or issuers may no longer be current. Always refer to the most recent research report relating to an issuer prior to making an investment decision.

In some cases, an issuer may be classified as Restricted or may be Under Review or Extended Review. In each case, investors should consider any investment opinion relating to such issuer (or its security and/or financial instruments) to be suspended or withdrawn and should not rely on the analyses and investment opinion(s) pertaining to such issuer (or its securities and/or financial instruments) nor should the analyses or opinion(s) be considered a solicitation of any kind. Sales persons and financial advisors affiliated with BofAS or any of its affiliates may not solicit purchases of securities or financial instruments that are Restricted or Under Review and may only solicit securities under Extended Review in accordance with firm policies.

Neither BofA Securities nor any officer or employee of BofA Securities accepts any liability whatsoever for any direct, indirect or consequential damages or losses arising from any use of this information.