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Biren Technology

Outperform

Initiation: Built for compute

Key Points

- Biren is one of the leading GPGPU players in China, leveraging on its high-computational power chip design and domestic supply chain focus.
- Biren's CUDA-compatible BIRENSUPA software stack and domestic supply chain position it for growth, with BR20X/BR30X launches as key catalysts.
- We initiate at Outperform with a target price of HK$140, based on 37x 2027E P/Sales, implying a 146% total shareholder return.

Strong hardware design meets software compatibility. Founded in 2019, Biren Tech stands out for its high computational power GPGPU design, focus on interconnect technologies, and its "BIRENSUPA" software stack to achieve CUDA-compatibility. We also believe the company's relatively early migration to domestic supply chain could bear fruit, and that its upcoming "BR20X" (to commercial launch in 2026E) / "BR30X" series to serve as near-term as well as medium-term catalysts.

Commercialisation in sight. Currently, government-backed intelligent computing clusters contribute nearly 40% of Biren Tech's revenue, while SOEs contribute about 30% and telecom operators and LLM players contribute the remaining 30%. We expect Biren to expand its presence among domestic cloud leaders and LLM players from 2027E, supported by new GPGPU launches and a maturing domestic supply chain.

Clear growth strategies include 1) strategic investment in R&D; 2) upgrade to the "chip+system+ecosystem" model; 3) stringent supply-chain management; and 4) AI-driven organisational structure development.

Valuation: Our TP of HK$140 is based on 37x 2027E P/sales ratio, which is the benchmark we assign to unprofitable China AI chip players. Biren is our perferred pick in the Hong Kong market.

Catalysts: Entry and market share gains in more domestic cloud and LLM players; new product launches; product ASP increases.

Investment Thesis and Recommendation

Biren leverages its high computational power GPGPU chip design, and its early migration to domestic supply chain can offer higher visibility, in our view. We see robust revenue growth momentum in 2026E-27E, and a visible track to profitability in 2027E.

Semicons & Semicon Equip
Hong Kong



Mark Li



Arthur Lai

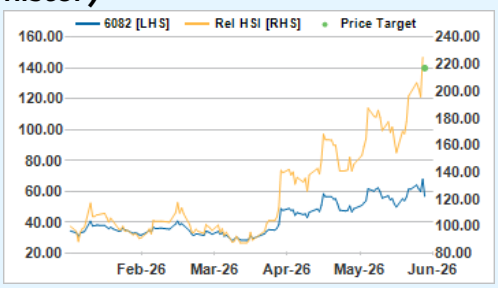
6082 HK	Outperform
Price (at 29 Jun 2026)	HK$62.30
12-month target	HK$140.00
12-month TSR (%)	124.7
Volatility Index	Very High
Market Cap (Local) (m)	149,669
Market Cap (USD) (m)	19,086
Free Float (%)	88
30-day avg turnover (USD) (m)	93.4

Investment Fundamentals

Year end 31 Dec	2025A	2026E	2027E	2028E
Revenue (m)	1,035	2,453	8,080	16,555
Revenue growth (%)	NM	137.1	229.3	104.9
EBIT (m)	(1,042)	(927.3)	1,316	4,432
EBIT growth (%)	NM	11.0	NM	236.8
Reported profit (m)	(16,493)	(896.4)	1,091	3,561
Adjusted profit (m)	(16,493)	(896.4)	1,091	3,561
EPS rep [CNY]	(8.7)	(0.4)	0.5	1.5
EPS rep growth (%)	NM	95.3	NM	226.5
EPS adj [CNY]	(8.7)	(0.4)	0.5	1.5
EPS adj (¢)	(8.7)	(0.4)	0.5	1.5
EPS adj growth (%)	NM	95.2	NM	226.5
Net debt/equity (%)	NM	41.1	99.6	40.9
ROA (%)	(17.6)	(12.7)	10.6	21.0
ROE (%)	69.2	8.9	25.2	53.5
PER rep (x)	(6.2)	(133.0)	114.5	35.1
PER adj (x)	NM	NM	114.5	35.1
EV/EBITDA (x)	(123.0)	(175.4)	88.3	28.6
P/BV (x)	(4.3)	33.0	25.6	14.8
Total div yield (%)	0.0	0.0	0.0	0.0

Quant (rank vs. global sector)	528 / 657

6082 HK rel HSI performance, & rec history



Source: FactSet, Macquarie Research, Jun 2026 (all figures in CNY unless noted, TP in HKD)

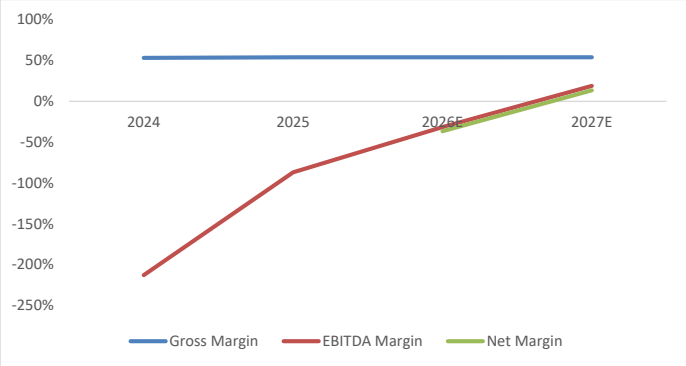
Key Risks to Investment Thesis

- Relatively early commercialisation with intensifying competition.
- PRC government could lift import controls on foreign GPUs.
- Further policy tightening from the US government.

Company Description

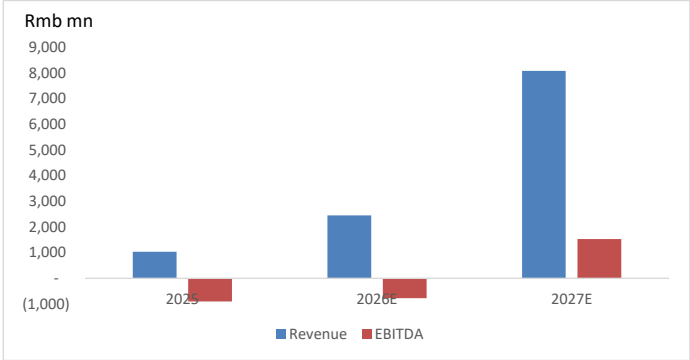
Biren Tech is one of the leading domestic GPGPU player in China, leveraging its self-developed hardware chip, and proprietary "BIRENSUPA" software ecosystem which is CUDA-compatible. It is focused on high computational power architecture, and advanced chip-to-chip interconnect technologies to enhance its competitiveness. It was founded in 2019, and listed on HKEx in Jan 2026.

Figure 1 - Biren Technology: Margin Trend



Source: Biren Technology, June 2026

Figure 2 - Biren Technology: Revenue and EBITDA Trend



Source: Biren Technology, June 2026

Biren Technology (6082 HK) CNY/(m) unless otherwise noted

Income Statement Dec FY	2025A	2026E	2027E	2028E	2H/25A	1H/26E
Revenue	**1,035**	**2,453**	**8,080**	**16,555**	**975.7**	**1,068**
Cost of Goods Sold	477.6	1,132	3,721	7,595	437.5	493.8
Gross Profit	**557.0**	**1,321**	**4,359**	**8,961**	**538.2**	**574.4**
EBITDA	**(896.9)**	**(770.2)**	**1,530**	**4,718**	**(369.2)**	**(604.9)**
Depreciation	109.8	134.2	165.5	205.0	58.2	67.1
Amortisation	35.1	22.9	48.7	81.2	22.2	11.5
EBIT	**(1,042)**	**(927.3)**	**1,316**	**4,432**	**(449.5)**	**(683.4)**
Net Interest Income	(15,451)	30.9	(32.8)	(242.9)	(14,443)	15.4
Associates	0.0	0.0	0.0	0.0	0.0	0.0
Exceptionals	0.0	0.0	0.0	0.0	0.0	0.0
Forex Gains / Losses	0.0	0.0	0.0	0.0	0.0	0.0
Other Pre-Tax Income	0.0	0.0	0.0	0.0	0.0	0.0
Pre-Tax Profit	**(16,493)**	**(896.4)**	**1,283**	**4,189**	**(14,893)**	**(668.0)**
Tax Expense	0.0	0.0	(192.4)	(628.4)	0.0	0.0
Net Profit	**(16,493)**	**(896.4)**	**1,091**	**3,561**	**(14,893)**	**(668.0)**
Minority Interests	0.0	0.0	0.0	0.0	0.0	0.0
Reported Earnings	**(16,493)**	**(896.4)**	**1,091**	**3,561**	**(14,893)**	**(668.0)**
Adjusted Earnings	**(16,493)**	**(896.4)**	**1,091**	**3,561**	**(14,893)**	**(668.0)**
Basic Shares Outstanding	1,892.2	2,311.7	2,311.7	2,311.7	1,892	2,102
Diluted Shares Outstanding	1,892.2	2,206.8	2,311.7	2,311.7	1,892	2,102
EPS (rep) [CNY]	(8.7)	(0.4)	0.5	1.5	(7.9)	(0.3)
EPS (adj) [CNY]	(8.7)	(0.4)	0.5	1.5	(7.9)	(0.3)
Total DPS [CNY]	0.0	0.0	0.0	0.0	0.0	0.0

Ratio	2025A	2026E	2027E	2028E		
Revenue Growth (%)	NM	137.1	229.3	104.9	-	-
EBITDA Growth (%)	NM	14.1	NM	208.4	-	-
EBIT Growth (%)	NM	11.0	NM	236.8	-	-
EPS Growth (adj) (%)	NM	95.2	NM	226.5	-	-
Gross Profit Margin (%)	53.8	53.8	53.9	54.1	-	-
EBITDA Margin (%)	(86.7)	(31.4)	18.9	28.5	-	-
EBIT Margin (%)	(100.7)	(37.8)	16.3	26.8	-	-
Net Profit Margin (%)	(1,594.1)	(36.5)	13.5	21.5	-	-
Payout Ratio (%)	NM	NM	0.0	0.0	-	-
PE (rep) (x)	(6.2)	(133.0)	114.5	35.1	-	-
PE (adj) (x)	NM	NM	114.5	35.1	-	-
EV/EBITDA (x)	(123.0)	(175.4)	88.3	28.6	-	-
EV/EBIT (x)	(105.9)	(145.6)	102.6	30.5	-	-
Price/Book (x)	(4.3)	33.0	25.6	14.8	-	-
Total Div Yield (%)	0.0	0.0	0.0	0.0	-	-

Balance Sheet	2025A	2026E	2027E	2028E
Cash	1,491	1,500	1,600	5,442
Receivables	1,111	2,353	6,198	8,618
Inventories	948.6	2,017	5,097	8,115
Investments	1,374	1,374	1,374	1,374
Fixed Assets	536.7	719.4	931.9	1,099
Intangibles	176.5	374.3	624.6	824.9
Other Assets	279.3	334.1	400.8	488.8
Total Assets	**5,918**	**8,671**	**16,227**	**25,962**
Payables	733.1	1,551	4,587	8,323
Short Term Debt	223.5	223.5	223.5	223.5
Long Term Debt	12.9	2,832	6,234	8,670
Other Liabilities	28,792	279.4	306.6	309.4
Total Liabilities	29,762	4,887	11,351	17,526
Shareholders' Funds	42.2	42.2	42.2	42.2
Minority Interests	0.0	0.0	0.0	0.0
Other	(23,886)	3,743	4,833	8,394
Total S/H Equity	**(23,844)**	**3,785**	**4,875**	**8,436**
Total Liab & S/H Funds	5,918	8,671	16,227	25,962
Net Debt / Equity (%)	NM	41.1	99.6	40.9
Interest Cover (x)	(0.1)	NM	40.1	18.2
ROE (%)	69.2	8.9	25.2	53.5
ROA (%)	(17.6)	(12.7)	10.6	21.0
ROIC (%)	NM	3.7	20.9	38.7

Cash Flow Analysis	2025A	2026E	2027E	2028E
EBITDA	**(896.9)**	**(770.2)**	**1,530**	**4,718**
Tax Paid	0.0	0.0	(192.4)	(628.4)
Chgs in Working Cap	(1,361)	(1,485)	(3,870)	(1,717)
Net Interest Paid	(15,451)	30.9	(32.8)	(242.9)
Other	15,572	(49.1)	(58.9)	(70.7)
Operating Cashflow	**(2,137)**	**(2,273)**	**(2,625)**	**2,060**
Acquisitions	0.0	0.0	0.0	0.0
Capex	(351.2)	(537.8)	(676.9)	(653.6)
Other	(883.8)	0.0	0.0	0.0
Investing Cashflow	**(1,235)**	**(537.8)**	**(676.9)**	**(653.6)**
Dividend (Ordinary)	0.0	0.0	0.0	0.0
Equity Raised	3,683	28,525	0.0	0.0
Debt Movements	195.9	2,819	3,401	2,436
Other	(549.2)	(28,525)	0.0	0.0
Financing Cashflow	**3,330**	**2,819**	**3,401**	**2,436**
Net Chg in Cash/Debt	**(42.5)**	**8.7**	**100.0**	**3,842**
Free Cashflow	**(2,488)**	**(2,811)**	**(3,301)**	**1,406**

Source: Company data, Macquarie Research Jun 2026

Investment thesis

Standout on high computational power

Biren Tech, founded in 2019 in Shanghai, began R&D on its first GPGPU chip in 2020. Its chip portfolio leverages relatively high computational power and other specs, and based on our estimates, its first chip BR106 (tape-out in 2021) already was equipped with 500+ TFLOPS of compute power (based on FP16). Biren's newer chip products BR166 (mass production in 2H2025) has been met with solid domestic customer demand.

Chip interconnect and computing clusters

BR166 is the first domestic product to package two computing dies using 2.5D chiplet technology. Besides, riding on its SuperPod technology, Biren has delivered 2,048-card computing clusters to the domestic customers, and we believe larger-scale intelligent computing clusters are being developed.

Software ecosystem

The company has established the "BIRENSUPA" software stack, consisted of multiple layers (drivers, libraries, programming platform, machine learning framework, and solutions). This software system has achieved CUDA-compatibility, and is capable of adapting to domestic large models to maximise Biren's GPGPU capabilities.

Why we are confident

We like Biren's GPGPU product portfolio skewed towards higher computational power, chip interconnect, and large-scale computing clusters. Moreover, the company's focus on the domestic supply chain is likely to bear fruit to facilitate its new product launch, in our view.

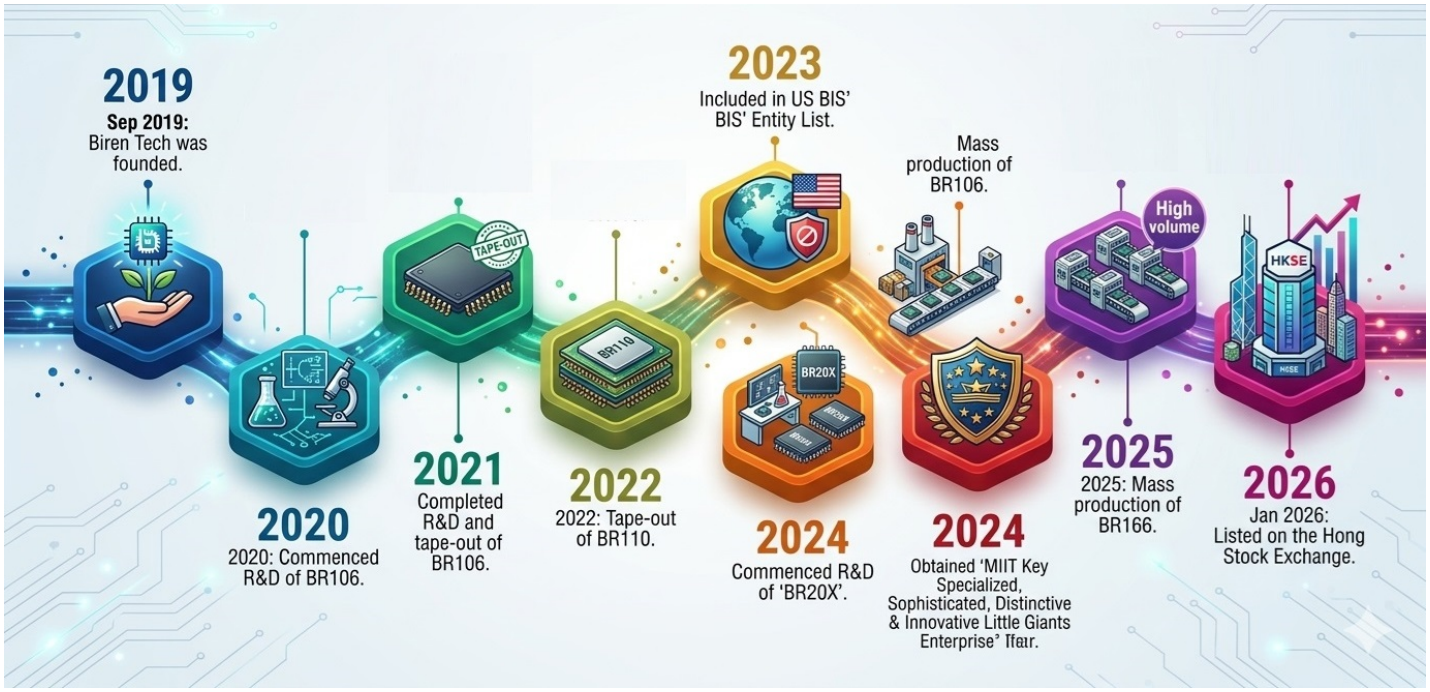
Company background

Biren Tech is a leading domestic GPGPU player in China, leveraging its self-developed hardware chip, and proprietary “BIRENSUPA” software ecosystem.

Biren Tech is one of China’s leading domestic GPGPU firms, leveraging its self-developed hardware chips and proprietary BIRENSUPA software ecosystem, which is CUDA-compatible. The company focuses on high-computing-power architectures and advanced chip-to-chip interconnect technologies to strengthen its competitiveness.

Biren Tech was founded by Zhang Wen in September 2019. In 2020, the company began R&D on its first GPGPU product, BR106, which targets cloud training and inference. The BR106 chip was successfully taped out in 2021, followed by the tape-out of BR110, which targets edge and cloud inference, in 2022. Mass production of BR106 began in January 2023, and Biren was added to the US BIS Entity List in October 2023. In 2024, the company launched a “thousand-card” intelligent computing cluster and began R&D on its next-generation BR20X series, in addition to starting mass production of BR110 in October 2024. Biren used chiplet and advanced chip-to-chip interconnect technologies to launch BR166, which co-packages two BR106 chip dies, and achieved mass production in 2025. The company listed on the Main Board of the HKEx in January 2026.

Figure 3 - Biren Technology: Major milestones



Source: Biren Technology, June 2026

Biren Tech's GPGPU products stand out on relatively strong computational power.

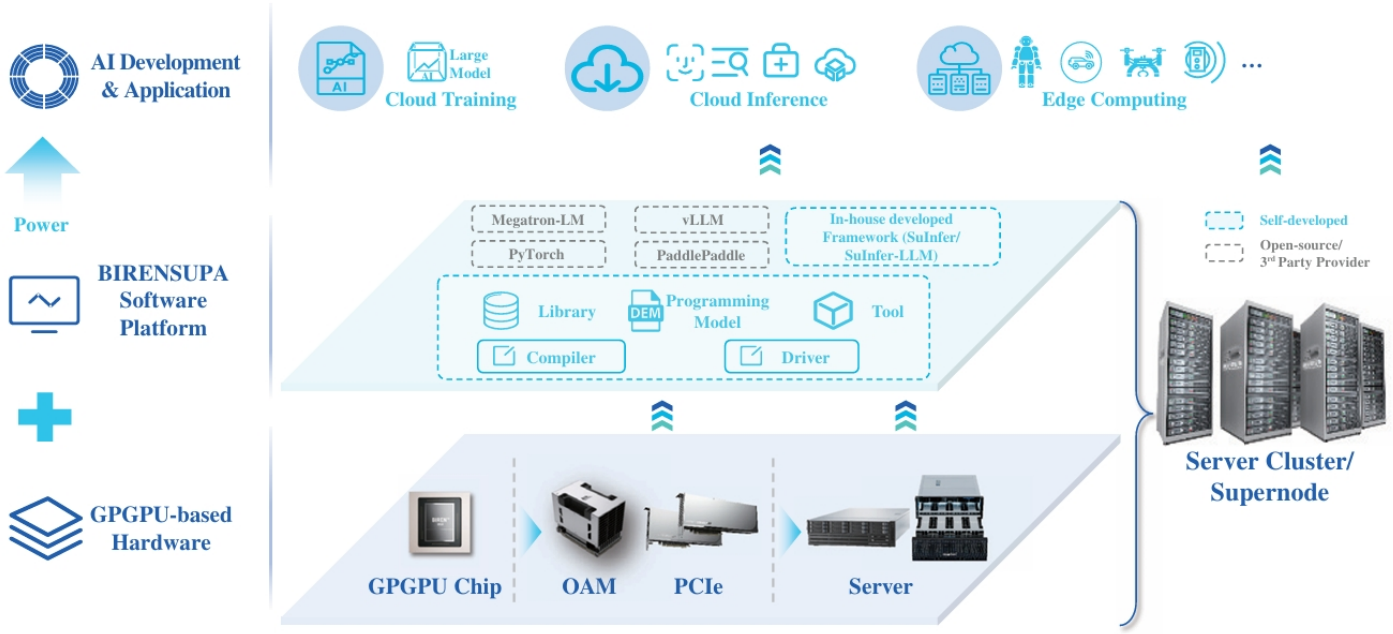
High performance specs

Biren Tech's GPGPU products stand out on relatively strong computational power. Based on our estimates, its BR106 chip can deliver 500+ TFLOPS (under FP16), with 32Gb HBM2e memory. The chips are generally assembled in the PCIe card or OAM (open accelerator module; in both air-cooled and liquid-cooled forms) form factors, to be integrated into the AI servers.

The BR166 is the first domestic product to package two computing dies using 2.5D chiplet technology, with maximum D2D (die-to-die) bidirectional bandwidth to reach 896Gb/s. The PCIe and OAM formfactors of BR166 reached mass production in 2H25.

For **interconnection**, Biren can connect up to 8 OAM cards using in-house P2P (peer-to-peer) interface, with high-speed SerDes (serialiser / de-serialiser) connection to achieve **scale-up** capability. As for **scale-out**, Biren has developed RDMA (remote direct memory access) technology to reduce latency, and increase bandwidth. Biren is capable to achieve 1,024-card scale-up, and 10,000+ cards scale-out. Its SuperPod（超节点）technology can enable 72-to-1,024 cards' scale-up capabilities. Particularly, the company has delivered 2,048-card GPU cluster projects with OCS (optical circuit switches) in cooperation with **Xizhi Tech**（曦智科技）, and it would explore CPO (co-package optics) to integrate optical modules with GPU chips.

Figure 4 - Biren Technology: Business model



Source: Biren Technology, June 2026

Biren's strength lies in development of multiple form factors for its chip family. Building on its BR106 and BR166 GPGPU chips, it has launched a comprehensive hardware systems including PCIe card, OAM (air-cooled and liquid-cooled), with interconnection bandwidth ranging 128Gb/s to 576 Gb/s, and thermal design power (TDP) from 150W to 600W. PCIe card products are mainly for cloud inference, and OAM form factors are for cloud training and inference especially for the LLMs. For gross margin, the PCIe card products can offer ~60% GPM / AI server ~50% GPM / intelligent computing cluster ~30% GPM.

Figure 5 - Biren Technology: Product portfolio

	GPGPU-based Hardware	Form Factor	Encoder/ Decoder	Bi-directional Interconnection Bandwidth	Thermal Design Power ("TDP")	Major Target Market	Current Status
BR106	BILI 106L	 OAM (liquid cooled)	32-channel/ 256-channel	256GB/s	400W	Cloud Training and Inference, especially for large-scale models	Commercially launched
	BILI 106M	 OAM (air cooled)					
	BILI 106B	 PCIe card		192GB/s	300W	Cloud Training and Inference	Commercially launched
	BILI 106C	 PCIe card		128GB/s	150W	Cloud Inference	Commercially launched
BR166	BILI 166L	 OAM (liquid cooled)	64-channel/ 512-channel	576GB/s	600W	Cloud Training and Inference, especially for large-scale models	Commercially launched
	BILI 166M	 OAM (air cooled)		576GB/s	550W		
	BILI 166C	 PCIe card		512GB/s	450W	Cloud Inference	Commercially launched

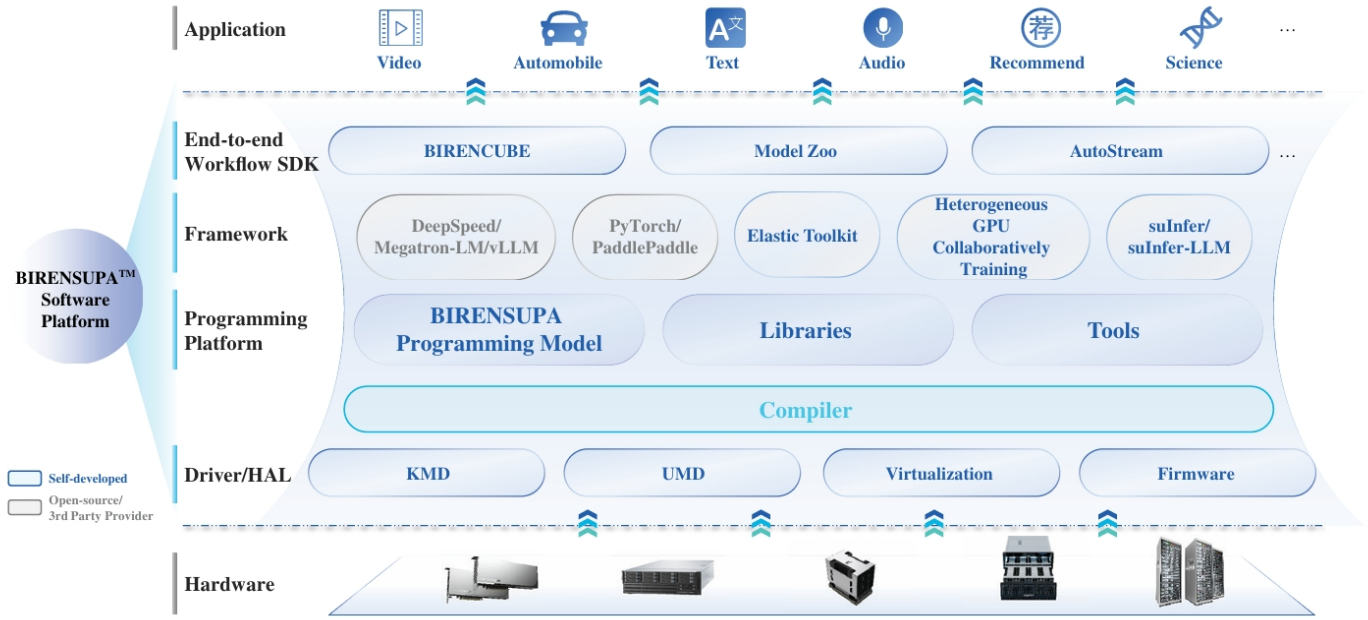
Source: Biren Technology, June 2026

The "BIRENSUPA" software platform also can provide ready-to-use AI solutions tailored to customer applications.

Software ecosystem

Biren's proprietary "BIRENSUPA" software platform consists of multiple layers (drivers, libraries, programming platform, machine learning framework, and solutions). The base layer drivers facilitate data transmission and multitasking across computing and storage architectures, and its virtualisation software allows physical devices to be partitioned into multiple virtual machines or containers, ensuring security, isolation and service quality especially for AI applications. Its programming platform includes programming model, compiler, self-developed libraries (e.g., suDNN library for deep neutral networks, and suBLAS library for high-performance mathematical operations) and other developer tools. Mainstream machine learning frameworks such as PyTorch, TensorFlow, and PaddlePaddle are supported, in addition to open-source LLM frameworks. The "BIRENSUPA" software platform also can provide ready-to-use AI solutions tailored to customer applications.

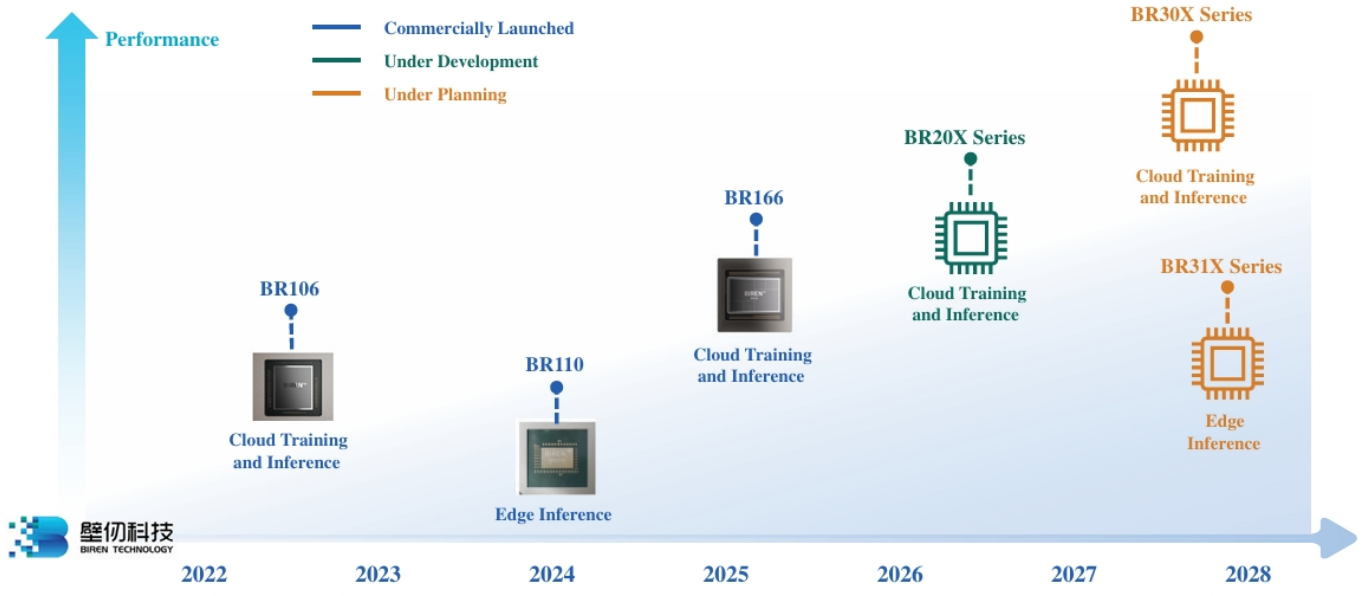
Figure 6 - Biren Technology: Software ecosystem



Source: Biren Technology, June 2026

For its new product roadmap, Biren expects its next-generation "BR20X" series to be commercially launched in 2026E, with enhanced computational power, chiplet design, larger and faster memory, higher interconnect bandwidth, and super-node system design. Particularly, "BR20X" could support a wider range of data formats (eg, FP8 and FP4), and it could have thousand-card level scale-up capabilities. Longer term, the "BR30X" (for cloud training and inference) and "BR31X" (for edge inference) are targeted to commercial launch in 2028E, and our supply chain checks show that it should be achievable.

Figure 7 - Biren Technology: New product pipeline

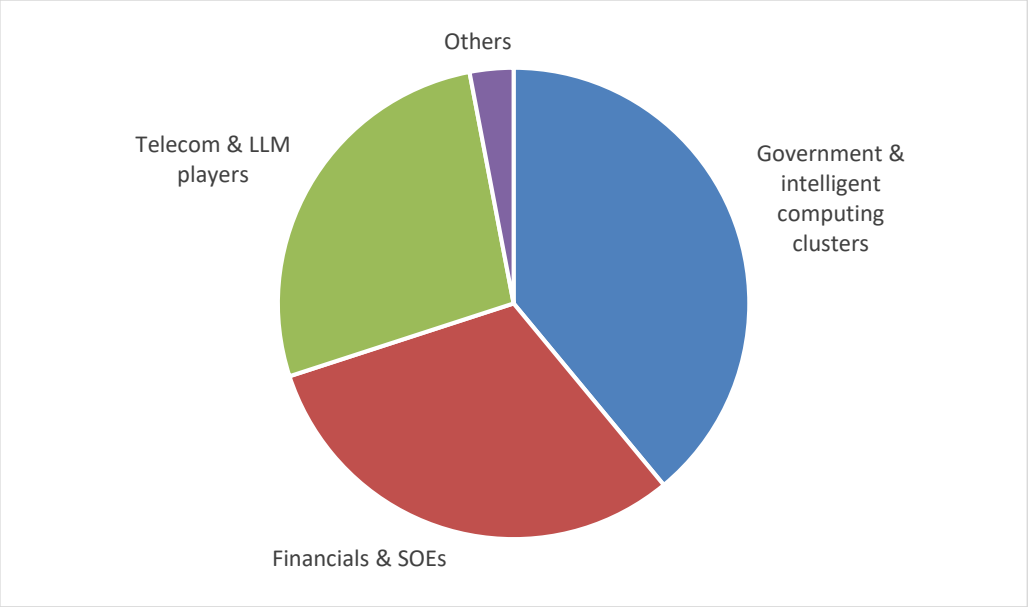


Source: Biren Technology, June 2026

Customer development

We believe large-scale intelligent computing clusters and government customers could contribute nearly 40% of Biren Tech's revenue, while financial institutions and SOEs could contribute about 30%, and telecom operators and LLM companies could contribute about 30%. Given Biren's more mature product lineup and upcoming models, such as BR20X, we expect the company to achieve breakthroughs with domestic cloud players and more LLM operators starting in 2027E.

Figure 8 - Biren Technology: Revenue breakdown (2026E)



Source: Biren Technology, June 2026

Growth strategies

Looking ahead, Biren Tech's medium-term strategies include the following:

1. **Strategically investing in R&D**, especially on GPU architecture and interconnect solutions; multi-die tech and advanced packaging; supernodes and optical interconnection; and full-stack software / open-source ecosystem.
2. **Upgrading to the "chip+system+ecosystem" model**, providing leading computational power system, and solutions based on software-hardware synergy, as well as high-quality product delivery / service capabilities.
3. **Developing its supply chain development**, with forward-looking positioning, strategic cooperation with the key players to jointly define future tech trends.
4. **Creating an AI-driven organisational structure**, in terms of integrating LLM and AI agent tech in corporate workflows, using AI tools to improve efficiency, and creating a positive innovation cycle.

Figure 9 - Biren Technology: Future strategies



Source: Biren Technology, June 2026

Biren announced that it raised about Rmb5.6bn in net IPO proceeds. Reflecting the strategies discussed above, the company plans to invest 32% of the proceeds, or about Rmb1.8bn, in the development of existing and next-generation GPGPU chips by the end of 2029E, 13% in GPGPU-based hardware, and 40% in the BIRENSUPA software platform. We highlight the relatively large allocation to the software stack, which underscores Biren's effort to develop a CUDA-compatible software ecosystem.

Figure 10 - Biren Technology: Use of IPO proceeds

Investment Area	Net Proceeds from IPO (Rmb mn)	Percentage	Expected Timeline
Development of existing GPGPU and next-generation GPGPU chips	~1,800	32%	By end-2029
Development of GPGPU-based hardware	~730	13%	By end-2029
Expanding the training & inference models for BIRENSUPA software stack	~560	10%	By end-2029
Enhancing the software platform	~1,100	20%	By end-2029
Software development infrastructure	~560	10%	By end-2029
Commercialization of intelligent computing solution	~280	5%	By end-2029
Working Capital	~560	10%	By end-2029
Total	**5,600**	**100%**	

Source: Biren Technology, June 2026

Management details

Biren Tech's senior management generally has solid experience in the industry. Its Chairman and CEO, Zhang Wen, previously worked as the President of Sense Time Group. Hong Zhou, Executive Director and CTO, was previously the Chief Architect at Huawei US Research Center, while its Executive Director / COO, Zhang Linglan, worked as an architect at AMD since 2001.

Figure 11 - Biren Technology: Management details

Name	Work Experience
Zhang Wen	Age 54, MBA from Columbia University; President &CEO of Enraytek Optoelectronics in 2010-2013; Chairman & CEO of Dingyu Hengrui Fund in 2013-2017; President of SenseTime Group in 2018-2019; founded the Company in 2019 and currently its Chairman & CEO
Hong Zhou	Age 60, Master Degree of Science from State University of New York (Buffalo); VP of Hardware Architecture at S3 Graphics in 2007-2016; Chief Architect at Huawei US Research Center in 2016-2020; Joined the Company in 2020 and currently Executive Director & CTO
Zhang Linglan	Age 52, MBA from University of California, Berkeley; Architect at AMD in 2001-2015; Senior R&D Manager at Samsung Electronics US R&D Center in 2015-2018; VP at Higon Austin R&D Center in 2018-2019; Joined the Company in 2019 and currently Executive Director & COO
Xiao Bing	Age 58, Bachelor Degree in Electronic Engineering from Tsinghua University; Software GM of China Telecom Industry at IBM in 2010-2014; GM of China Telecom Industry at Oracle in 2014-2017; VP of business development at SenseTime Group in 2019-2020; Joined the Company in 2020 and currently Executive Director & General Manager
Pan Luting	Age 50, MBA from Columbia University; Senior Planning Manager at Consolidated Edison Co. in New York in 2009-2018; Director of Asia & Strategic Development Lead at Petuum Inc. in 2018-2020; Joined the Company in 2020 and currently Executive Director, Secretary of the Board and Responsible Person of Finance

Source: Biren Technology, June 2026

Shareholding structure

Figure 12 - Biren Technology: Shareholding structure

Entity	Shareholding
Shanghai Biliren Enterprise Mgmt Consulting Partnership (ESOP)	7.8%
Zhang Wen	7.5%
Zhuhai Hengqin Innovation Development Co.	3.3%
Others	81.4%
Total	**100.0%**

Source: Biren Technology, June 2026

Financial & Valuation analysis

- **Revenue and gross profit:** Biren Tech registered Rmb1.04bn revenue in 2025, and we forecast a 152% CAGR over 2025-28E, reaching Rmb16.6bn in 2028E. This is mainly driven by the sales volume of its GPGPU chips, amid keen domestic demand for high computational power AI chips. The company generated gross profit of Rmb557mn in 2025, representing a 53.8% gross margin. Looking ahead, we forecast gross margin to be rather stable, reaching 54.1% in 2028E.
- **R&D expenses:** Biren had 689 R&D staff as of December 2025, and the company's R&D expenditure reached Rmb1.5bn (up 78% YoY). We forecast 20% R&D expense CAGR for Biren over 2025-28E (from a relatively high base in 2025), and the company should enjoy significant operating leverage, given its 152% revenue CAGR for the same period per our forecast.
- **Net profit:** The company's net loss of Rmb16.5bn in 2025 was distorted by the non-cash item of Rmb15.5bn fair value loss in the redemption liabilities (this item became zero after Biren's IPO in January 2026). We forecast its net loss to reach Rmb896mn in 2026E, and think the company could break even with Rmb1.1bn profit for 2027E riding on revenue scale and operating leverage on R&D expenses.
- **Balance sheet and cash flow:** We expect Biren's inventory balance to more than double to Rmb2.1bn in 2026E, as the company prepares for more GPGPU chips to meet customer demand. Hence, we estimate operating cash flow will see outflow of Rmb 739mn this year mainly on working capital increases; we project this will turn into positive operating cash flow starting in 2027E.

Figure 13 - Macquarie Estimates vs. Consensus

	2026E						2027E					
	Revenue			NP			Revenue			NP		
Rmb mn	MQ	Cons.	%	MQ	Cons	%	MQ	Cons.	%	MQ	Cons	%
Cambricon	18,501	17,653	4.8%	6,696	5,856	14.3%	35,152	32,677	7.6%	12,208	11,357	7.5%
Biren Tech	2,453	2,283	7.5%	-896	-995	-9.9%	8,080	7,653	5.6%	1,091	1,063	2.6%
Iluvatar	2,981	2,704	10.3%	-590	-561	5.2%	7,469	5,556	34.4%	937	856	9.5%
MetaX	3,883	3,618	7.3%	49	45	9.6%	9,433	6,092	54.8%	1,094	885	23.6%
Hygon	21,274	22,316	-4.7%	3,946	4,734	-16.7%	30,970	30,822	0.5%	6,395	6,916	-7.5%

Source: Bloomberg, Macquarie Estimates, June 2026

Valuation: For unprofitable China AI chip players including Biren Tech, we adopt an average target valuation of key China AI firms: Zhipu (at 50x 2027E P/sales), MiniMax (50x 2027E P/sales), Cambricon (implied at 36x 2027E P/sales) and Hygon (implied at 10x 2027E P/sales). The average is 37x 2027E P/sales, which is our target multiples for Biren Tech, We adopt the same target multiples for unprofitable China AI chip firms, namely Iluvatar and MetaX.

Figure 14 - Target Valuation for Key China AI Players

Name	Ticker	MQ Rating	Target Valuation Multiples	Implied 2027E P/Sales (x)
Cambricon Technologies	688256.CH	OP	0.8x PEG	36
Hygon Information	688041.CH	UP	0.8x PEG	10
Knowledge Atlas Technology (Zhipu)	2513.HK	OP	50x 2027E P/Sales	50
MiniMax Group	100.HK	OP	50x 2027E P/Sales	50
			Average	**37**

Source: Macquarie Estimates, June 2026

Risks

Relatively early commercialisation with intensifying domestic competition. More domestic GPGPU and ASIC players are emerging to get a share of this emerging-market segment. We have seen players including Cambricon, MetaX, Iluvatar, Moore Threads, and Enflame aggressively compete in the market. Biren sees relatively small contribution from LLM players, and it is still in the process of establishing cooperation with domestic cloud players as new customers. There is no assurance that the competition would not intensify and lead to potential price wars or greater difficulty in gettting new customers in the domestic AI chip sector.

Impact if the PRC government loosens the import control on foreign GPUs. In our industry section, we highlight that domestic AI chip players' core products (including Biren) still have a meaningful performance gap with global leaders such as NVIDIA. Biren (based on the domestic supply chain) could also see some manufacturing efficiency gap with the global peers. Hence, if the PRC government for any reason loosens the import control on foreign GPUs, we think it could have a meaningful impact to Biren' fundamental performance.

Further policy tightening by the US government. Biren Tech was included in the **US BIS'** (Bureau of Industry and Security) **Entity List** in October 2023, which is a list of non-US companies and entities that are subject to additional licence requirements for the export of specific items. The US Department of the Treasury issued **the Outbound Investment Rule (OIR)** in October 2024, which prohibits investments by a US person in an entity on the BIS Entity List, as well as in the sectors including semiconductor and microelectronics, quantum information technologies and AI systems. Hence, if there is further US tightening, domestic AI chip players may be affected, including Biren.



Figure 15 - China AI Chip Sector: Peers Comparison

Company	Ticker	Rating	TP (LC)	CP (LC)	Mkt Cap (LC$m)	Mkt Cap (US$m)	PER (x) 26E	PER (x) 27E	EV/EBITDA (x) 26E	EV/EBITDA (x) 27E	PBR (x) 26E	PBR (x) 27E
China												
Biren Tech	6082 HK	Outperform	140.00	57.00	136,936	17,465	NA	104.8	NA	88.3	30.2	23.4
Cambricon	688256 CH	Outperform	2060.00	1458.00	914,531	134,480	144.0	75.0	134.2	65.2	52.0	32.2
Hygon	688041 CH	Underperform	138.00	344.90	799,978	117,656	203.2	125.4	121.3	81.0	30.0	24.8
Iluvatar	9903 HK	Outperform	1240.00	684.00	171,913	21,926	NA	161.0	NA	127.5	85.6	55.9
MetaX	688802 CH	Outperform	882.00	730.40	292,233	42,967	5922.8	267.2	1078.9	194.4	22.1	20.4
Global												
Broadcom	AVGO US	Neutral	437.00	365.02	1,736,612	1,736,612	31.9	20.9	23.3	15.9	15.6	9.6
MediaTek	2454 TT	Outperform	10000.00	3880.00	6,223,114	195,364	71.0	33.7	58.6	27.5	15.2	12.7
AMD	AMD US	Not Rated	N/A	521.58	850,489	850,489	97.2	48.2	58.7	33.5	11.9	10.0
ARM	ARM US	Not Rated	N/A	334.27	357,027	357,027	344.8	187.9	133.2	98.3	36.1	27.4
Intel	INTC US	Not Rated	N/A	128.32	644,936	644,936	NA	120.7	34.1	28.6	5.4	5.0
NVIDIA	NVDA US	Not Rated	N/A	192.53	4,659,226	4,659,226	20.9	15.2	17.9	12.3	16.3	10.1

Source: Bloomberg, Macquarie Research, June 2026

Closing price as of 26-Jun-2026

Key Quant Findings
The quant model currently holds a strong negative view on Biren Technology. The strongest style exposure is Growth, indicating this stock has good historic and/or forecast growth. Growth metrics focus on both top and bottom line items. The weakest style exposure is Quality, indicating this stock is likely to have a weaker and less stable underlying earnings stream.

Macquarie Alpha Model: Key rankings

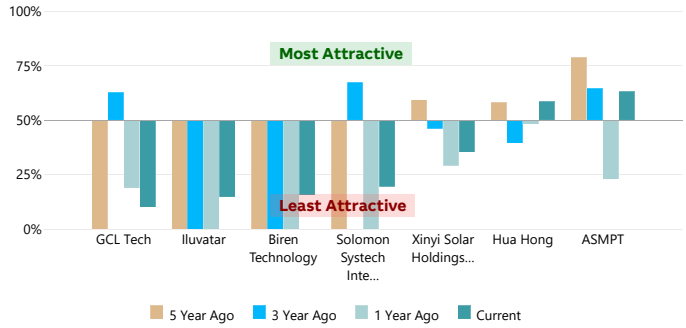
The Macquarie Quant's flagship Alpha model is a dynamic multi-factor model based on a staple of quant factors such as value, momentum, revisions, quality, and risk.

	Global	Market (Country)	Sector
	Whole Universe	Hong Kong	Semiconductors & Semiconductor Equip.
Macquarie Alpha Model	**15379/17949**	**506/599**	**528/657**
Fundamental (Consensus) *	**2843/17949**	**185/599**	**130/657**

** based on Total Shareholder Return = Consensus Price target / Current Price*

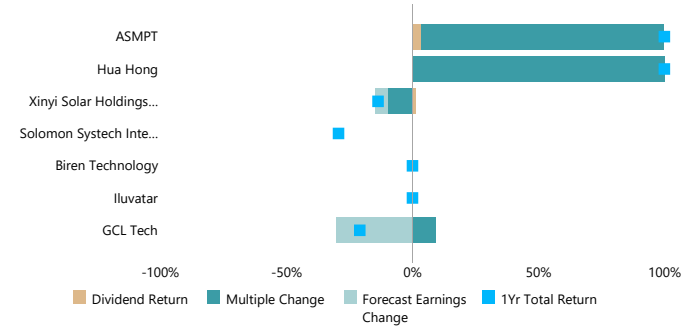
Current and Historical Alpha Model Rank

The chart shows the Macquarie Alpha model market ranking against the company's peers and over recent history.



Drivers of Stock Return

Breakdown of 1-year total return (local currency) into returns from dividends, changes in forward earnings estimates and the resulting change in earnings multiple.



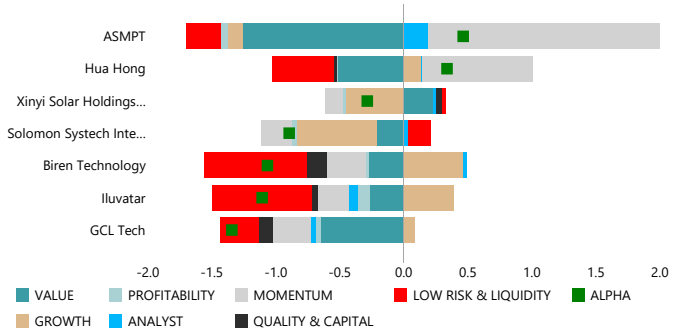
Alpha Model Decomposition

The Macquarie Alpha is decomposed into its sector and market relative factor & styles exposures (a higher/better percentile is coded in green, whilst lower in red).

Factors / Styles	Percentile relative to sectors (/657)	Percentile relative to market (/599)	Core factors in definition
ALPHA	20%	16%	Built from the styles below
VALUE	44%	29%	Book, CF, Yield, Earnings Multiples
ANALYST	78%	77%	Revisions (Earnings, Recommendations)
MOMENTUM	22%	21%	Price Momentum
GROWTH	95%	95%	EPS, Sales (Forecast, Historic)
PROFITABILITY	54%	22%	ROE, Margin, Asset Turnover
QUALITY	0%	2%	Accruals, Earn Stability, Cash Conversion
CAPITAL	39%	23%	Investment/Capex, Net share issuance
LIQUIDITY	73%	86%	Size, Turnover, Analyst Coverage
LOW RISK	0%	2%	Beta, Volatility, Earn.Cert, Leverage
TECHNICAL	21%	8%	MACD, RSI, Bollinger, Williams R, etc

Factors driving the Alpha Model vs peers

For the comparable firms this chart shows the key underlying styles and their contribution to the current overall raw Alpha score.



Macquarie Style Returns over last year

Recent performance to Macquarie style factors

	Monthly Factor Long-Short Returns for												Last 5 Years (ann)	Last 10 Years (ann)
Asia Ex JP	May - 26	Apr - 26	Mar - 26	Feb - 26	Jan - 26	Dec - 25	Nov - 25	Oct - 25	Sep - 25	Aug - 25	Jul - 25	Jun - 25		
ALPHA	3%	3%	4%	0%	0%	3%	3%	2%	-3%	-6%	-7%	-1%	7%	5%
VALUE	1%	-7%	6%	0%	-2%	3%	5%	4%	-4%	-4%	-3%	2%	10%	4%
ANALYST	4%	12%	-2%	0%	6%	5%	-2%	3%	4%	1%	-3%	4%	15%	13%
MOMENTUM	17%	19%	-4%	5%	8%	6%	-1%	-2%	0%	-6%	-6%	-2%	5%	5%
GROWTH	7%	7%	-4%	-1%	4%	2%	-2%	0%	5%	8%	0%	1%	5%	3%
PROFITABILITY	1%	-4%	3%	0%	-4%	1%	3%	0%	-4%	-2%	-6%	1%	-5%	-3%
QUALITY	-2%	-4%	2%	-1%	-4%	-1%	1%	-4%	-6%	1%	-3%	-4%	-6%	-3%
CAPITAL	-1%	-12%	2%	-2%	2%	-1%	3%	-3%	-1%	-2%	-1%	-1%	1%	-4%
LIQUIDITY	10%	7%	-1%	3%	1%	2%	-1%	-1%	3%	3%	-2%	1%	-2%	3%
LOW RISK	-8%	-13%	6%	-2%	-8%	-2%	5%	1%	-6%	-11%	-9%	-5%	-9%	-8%

Source (all charts): FactSet, Refinitiv, and Macquarie Quant. For more details on the Macquarie Alpha model or for more customised analysis and screens, please contact the Macquarie Global Quantitative Team: maccapequitiesresearchquantglobal@macquarie.com. Explanation for items on this page can be found at https://www.macquarieinsights.com/rp/d/r/p/OTUyMzg1

Analysts

Mark Li
+852 3922 4701
mark.li@macquarie.com
Macquarie Capital Limited

Arthur Lai
852 3922 4216
art.lai@macquarie.com
Macquarie Capital Limited

Important Disclosures

Recommendation definitions	Volatility index definition	Financial definitions
Macquarie – Asia and USA Outperform – expected return >10% Neutral – expected return from -10% to +10% Underperform – expected return <-10% **Macquarie – Australia/New Zealand** Outperform – expected return >10% Neutral – expected return from 0% to 10% Underperform – expected return <0% During periods of share price volatility, recommendations and target prices may occasionally and temporarily be inconsistent with the above definitions. **Recommendations** – 12 months **12-month target** – Expected share price in 12 months **Valuation** – The company's estimated fair value share price based on the disclosed valuation methodology **Note**: Quant recommendations may differ from Fundamental Analyst recommendations	This is calculated from the volatility of historical price movements. **Very high** – highest risk – Stock should be expected to move up or down 60–100% in a year – investors should be aware this stock is highly speculative. **High** – stock should be expected to move up or down at least 40–60% in a year – investors should be aware this stock could be speculative. **Medium** – stock should be expected to move up or down at least 25–40% in a year. **Low** – stock should be expected to move up or down at least 15–25% in a year. * Applicable to select stocks in Asia/Australia/NZ **Note:** expected return is reflective of a Medium Volatility stock and should be assumed to adjust proportionately with volatility risk	All "Adjusted" data items have had the following adjustments made: **Added back:** goodwill amortisation, provision for catastrophe reserves, IFRS derivatives & hedging, IFRS impairments & IFRS interest expense Excluded: non recurring items, asset revals, property revals, appraisal value uplift, preference dividends & minority interests **EPS** = adjusted net profit / efpowa* **ROA** = adjusted ebit / average total assets **ROA Banks/Insurance** = adjusted net profit /average total assets **ROE** = adjusted net profit / average shareholders funds **Gross cashflow** = adjusted net profit + depreciation *equivalent fully paid ordinary weighted average number of shares All Reported numbers for Australian/NZ listed stocks are modelled under IFRS (International Financial Reporting Standards).

Recommendation proportions for quarter ending 31 Mar 2026

	AU/NZ	Asia	USA	
Outperform	66.90%	69.32%	67.14%	(for global coverage by Macquarie, 1.93% of stocks followed are investment banking clients)
Neutral	27.18%	17.21%	32.86%	(for global coverage by Macquarie, 0.40% of stocks followed are investment banking clients)
Underperform	5.92%	13.47%	0.00%	(for global coverage by Macquarie, 0.00% of stocks followed are investment banking clients)

Company-Specific Disclosures

Company Name	Disclosure
Biren Technology (6082 HK) **Outperform** 12-month target: HK$140.00 - PS Valuation: HKD 109.00 - PS Price: HK$62.30	Macquarie Capital Limited makes a market in the securities of Shanghai Biren Technology Co Ltd.

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