Brainchip Ltd BRN.AX

Equity Research Australia | Information Technology

10 September 2025

More deals amid higher edge AI adoption

Promising developments across the company (partnerships) and the industry (increasing edge AI adoption) are making us optimistic about the prospects of Brainchip's stock. **We reiterate our valuation estimate of A$1.00 per share (no change from prior estimate).**

Key Messages

1H25 results within expectations: Brainchip released their half-year report, with cash receipts of $1.5m (vs expected $1.5m) while cash expenses were $9.3m (vs expected $8.2m). The company currently has $13.5m of cash balance, enough for 4 quarters of cash runway, considering a quarterly net cash burn of $3.8m.

Multiple on-going deals with revenue potential: Brainchip's team had been firing on all cylinders, having secured deals involving technologies/applications across industries such as consumer, enterprise, aerospace and defense. Current revenue-generating deals are with AFRL (defense) and Frontgrade Gaisler (space) while partnerships/collaborations with potential to transition into licensing (within <1 year, based on historical trends) are Onsor (health/wearable), ISL (defense), Aquimea (defense/enterprise), Chelpis (cybersecurity), and HaiLa (IoT).

Increasing Edge AI adoption: Over the past months, we've seen increased investments into edge computing platforms and capabilities in various industries such as logistics (Maersk), energy (SLB/Schlumberger), industrial (Cisco/Sima.AI), infrastructure (smart city, IoT), and telecommunications (SK Telecom, Rakuten).

Investment Thesis and Valuation

Potential game-changer for Edge AI adoption: Brainchip's technology can handle complex computations (AI applications) but at a lower power consumption and little-to-no reliance on cloud infrastructure. These are essential for Edge AI, which is the next area of growth as it addresses the constraints of current cloud AI infrastructure such as costly processors (NVIDIA GPUs), bandwidth, storage, and energy costs (5G, data centres).

Valuation of $1.00: We valued Brainchip through several methodologies using scenario analysis (+399% upside), M&A comparables (+338% upside) and real options (+935% upside). We made no changes to our valuation and earnings estimates since 1H25 results were within expectations and there haven't been any additional licensing deals signed that was beyond our expectations (2 per year).

Catalysts and Risks

More licensing deals amid increasing Edge AI adoption: We expect more licensing deals to be announced in the next 12 months, amid the increased collaboration and partnership agreements signed over the last 2 quarters.

Risk to investment thesis: The key risks that Brainchip faces are uncertainty on timing of licensing deals, realisation of royalty revenues, pace of Edge AI adoption, and availability of funding for R&D and commercialisation.

Brainchip Holdings Ltd is an Australia-based company established in 2004 and developed the Akida technology, a neuromorphic computing approach that mimics the way the human brain works, thereby providing higher performance and efficiencies. It looks to apply its technology to the edge AI sector, which covers multiple industries such as automotive, industrial, healthcare, consumer, and space/aerospace.

https://brainchip.com/company/

Key Data

Valuation (A$)	1.00
Current Price (A$)	0.20
Market Cap (A$)	405
30D Ave Turnover (A$m)	0.114

Trim Capital forecasts

FY Year End	23A	24A	25E	26E
Adj NPAT ($m)	(29)	(24)	(21)	(24)
EPS adj (c)	(0.9)	(0.9)	(0.8)	(0.8)
EPS gwth (%)	32.1	0.0	-9.3	0.9
PE adj (x)	-	-	-	-
DPS (c)	-	-	-	-
Div yield (%)	-	-	-	-
ROE (%)	-	-	-	-
PB (x)	21.5	19.9	20.8	16.9

12- Month Share Price Performance

Source: LSEG

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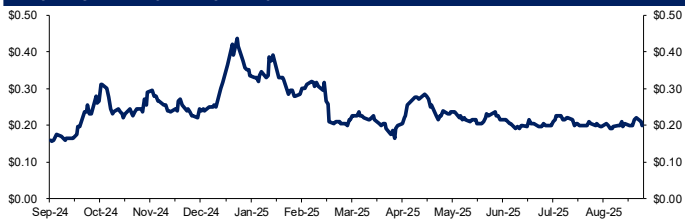
Financial Summary

BRAINCHIP HOLDINGS LTD — BRN-AX

Year end 31 December, $

12-MONTH SHARE PRICE PERFORMANCE



MARKET DATA		
Price	A$	$0.20
Valuation	A$	$1.00
52 week low - high	A$	0.16 - 0.54
Market capitalisation	A$m	405
Shares on issue (basic)	m	2,026
Options / rights (dilutive)	m	167
Other equity	m	0
Shares on issue (fuly diluted)	m	2,193

PROFIT AND LOSS		FY23A	FY24A	FY25E	FY26E	FY27E
Product revenue	$m	0.2	0.2	0.2	0.4	0.6
License revenue	$m	-	-	0.2	3.0	6.0
Development service revenue	$m	0.1	0.2	2.4	0.5	0.5
Royalty revenue	$m	-	-	-	-	-
Total Revenues	**$m**	**0.2**	**0.4**	**2.7**	**3.8**	**7.1**
Cost of Sales	$m	(0.1)	(0.5)	(1.1)	(0.8)	(1.4)
Research & Development	$m	(7.0)	(7.7)	(7.2)	(7.8)	(8.3)
Selling & Marketing	$m	(4.7)	(4.6)	(4.6)	(5.0)	(5.2)
General & Administrative	$m	(5.7)	(6.1)	(7.5)	(8.0)	(8.0)
Share-based Payments	$m	(11.4)	(5.5)	(7.9)	(9.3)	(9.9)
Total Operating Expenses	**$m**	**(28.8)**	**(23.9)**	**(27.2)**	**(30.1)**	**(31.4)**
Reported NPAT	$m	(28.9)	(24.4)	(24.9)	(27.0)	(25.7)
Cash NPAT	$m	(16.9)	(18.0)	(16.1)	(17.2)	(15.5)
Weighted average diluted shares	m	1,844.8	1,964.2	2,134.1	2,213.7	2,260.8

INVESTMENT FUNDAMENTALS		FY23A	FY24A	FY25E	FY26E	FY27E
EPS - diluted reported	cps	(157.0)	(1.2)	(1.3)	(1.3)	(1.2)
EPS - diluted cash	**cps**	**(0.9)**	**(0.9)**	**(0.8)**	**(0.8)**	**(0.7)**
EPS growth	%	32%	0%	-11%	3%	-11%
PE	x	(21.8)	(21.8)	(24.6)	(24.0)	(27.1)
DPS	cps	-	-	-	-	-
Franking	%	n.a.	n.a.	n.a.	n.a.	n.a.
Dividend yield	%	0%	0%	0%	0%	0%
Payout rato	%	0%	0%	0%	0%	0%
Operating cash flow per share	cps	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)
Free cash flow to equity per share	cps	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)
FCF yield	%	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)
Enterprise value	$m	421	424	428	419	425
EV/Total Revenue	x	1,813	1,066	159	109	60
EV/EBITDA	x	(25)	(24)	(27)	(24)	(27)
EV/EBIT	x	(25)	(24)	(27)	(24)	(27)
NAV per share	A$	0.0	0.0	0.0	0.0	0.0
Price / NAV	x	21.5	19.9	20.4	16.6	13.3
NTA per share	A$	0.0	0.0	0.0	0.0	0.0
Price / NTA	x	24.3	20.8	21.0	16.7	13.3

BALANCE SHEET		FY23A	FY24A	FY25E	FY26E	FY27E
Cash and cash equivalents	$m	14.3	20.0	18.2	24.0	31.5
Receivables	$m	2.4	0.9	4.0	4.0	4.0
Property, plant and equipment	$m	0.4	0.3	0.3	0.2	0.2
Intangible Assets	$m	0.6	-	-	-	-
Other assets	$m	2.4	1.8	1.5	1.1	0.9
Total Assets	**$m**	**20.2**	**23.0**	**24.0**	**29.4**	**36.7**
Trade and other liabilities	$m	0.9	1.4	1.9	1.9	1.9
Borrowings	$m	0.1	0.0	-	-	-
Other liabilities	$m	2.4	1.8	2.5	2.5	2.5
Total Liabilities	$m	3.3	3.2	4.3	4.3	4.3
Net assets	**$m**	**16.8**	**19.8**	**19.7**	**25.1**	**32.4**
Net tangible assets	**$m**	**15.9**	**16.6**	**21.3**	**14.9**	**18.9**
Invested capital	**$m**	**1.4**	**(0.2)**	**0.7**	**2.6**	**(0.1)**
Tangible invested capital	**$m**	**0.5**	**(2.6)**	**(1.8)**	**0.7**	**(1.0)**
Contributed equity	$m	145.6	167.8	184.4	207.5	230.6
Treasury shares	$m	-	-	-	-	-
Reserves	$m	45.2	50.2	58.5	67.8	77.7
Retained earnings/losses	$m	(174.0)	(198.2)	(223.1)	(250.2)	(275.9)
Non-controlling interests	$m	-	-	-	-	-
Total equity	**$m**	**16.8**	**19.8**	**19.7**	**25.1**	**32.4**
Basic shares on issue	m	1,805.8	1,972.5	2,012.5	2,082.5	2,152.5

KEY RATIOS		FY23A	FY24A	FY25E	FY26E	FY27E
NTA/Net Receivables	%	n.a.	n.a.	n.a.	n.a.	n.a.
ROE - reported	%	(2)	(1)	(1)	(1)	(1)
ROE - cash	%	(1)	(1)	(1)	(1)	(1)
Net cash	$m	15	19	23	14	20
Interest cover	x	n.a.	n.a.	n.a.	n.a.	n.a.
Gearing (net debt / EBITDA)	x	n.a.	n.a.	n.a.	n.a.	n.a.
Leverage (net debt / invested capital)	x	(11)	91	(35)	(5)	155

DUPONT ANALYSIS		FY23A	FY24A	FY25E	FY26E	FY27E
Net Profit Margin	%	n.a.	n.a.	n.a.	n.a.	n.a.
Asset Turnover	x	n.a.	n.a.	n.a.	n.a.	n.a.
Return on Assets	%	n.a.	n.a.	n.a.	n.a.	n.a.
Financial Leverage	x	n.a.	n.a.	n.a.	n.a.	n.a.
Return on Equity	%	n.a.	n.a.	n.a.	n.a.	n.a.

CASH FLOW		FY23A	FY24A	FY25E	FY26E	FY27E
Operating						
Net operating cashflow	**$m**	**(17.5)**	**(15.9)**	**(15.4)**	**(17.2)**	**(15.5)**
Capital expenditure	$m	(0.1)	(0.3)	(0.1)	(0.1)	(0.1)
Acquisitions and divestments	$m	-	-	-	-	-
Net investment cashflow	**$m**	**(0.1)**	**(0.1)**	**(0.1)**	**(0.1)**	**(0.1)**
Equity financing	$m	9.2	23.0	13.4	23.1	23.1
Debt financing	$m	-	-	-	-	-
Leases	$m	(0.3)	(0.4)	(0.2)	-	-
Net financing cashflow	**$m**	**8.8**	**22.6**	**13.2**	**23.1**	**23.1**
Net cash flow	**$m**	**(8.8)**	**6.6**	**(2.3)**	**5.9**	**7.5**
Free cash flow to equity	$m	(18.0)	(16.4)	(15.7)	(17.2)	(15.6)

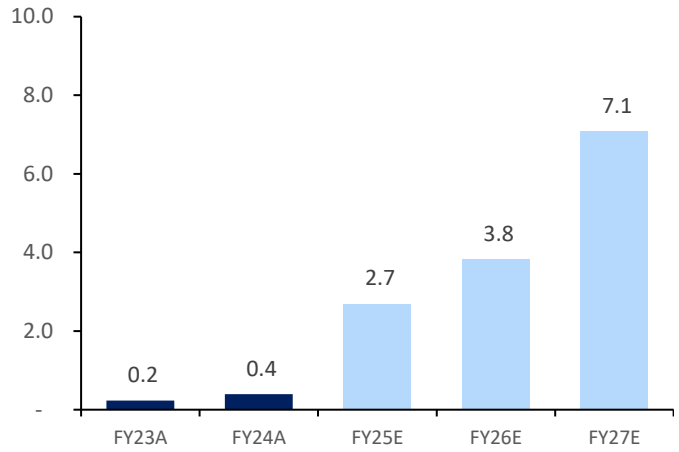
KEY PERFORMANCE INDICATORS		FY23A	FY24A	FY25E	FY26E	FY27E
Activity metric	$m	n.a.	n.a.	n.a.	n.a.	n.a.
Revenue / Activity metric	%	n.a.	n.a.	n.a.	n.a.	n.a.
Cost to income ratio	%	n.a.	n.a.	n.a.	n.a.	n.a.
Credit losses as a % of receivables	%	n.a.	n.a.	n.a.	n.a.	n.a.
Growth in receivables	%	n.a.	n.a.	n.a.	n.a.	n.a.

HALF YEARLY DATA		1H22A	2H22A	1H23A	2H23A	1H24A
Revenues	$m	4.8	0.2	0.1	0.1	0.1
Operating Expenses	$m	(13.0)	(14.0)	(16.9)	(12.0)	(11.7)
EBITDA	$m	(8.3)	(13.6)	(16.5)	(11.6)	(10.7)
Reported NPAT	$m	(8.3)	(13.8)	(17.1)	(11.7)	(11.5)
Cash NPAT	$m	(4.3)	(8.1)	(9.6)	(7.3)	(9.1)
EPS - diluted cash	**cps**	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)
EPS - diluted reported	cps	(0.5)	(0.8)	(0.9)	(0.6)	(0.6)
DPS	cps	-	-	-	-	-

Source: BRN reports, Trim Capital estimates

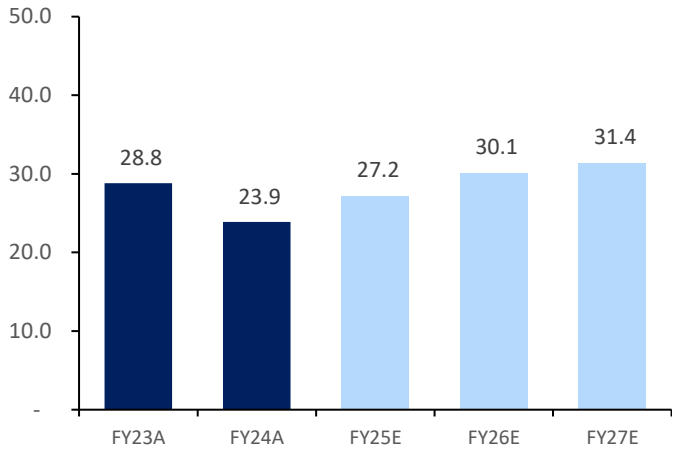
Key Charts

Figure 1: Revenues ($m)



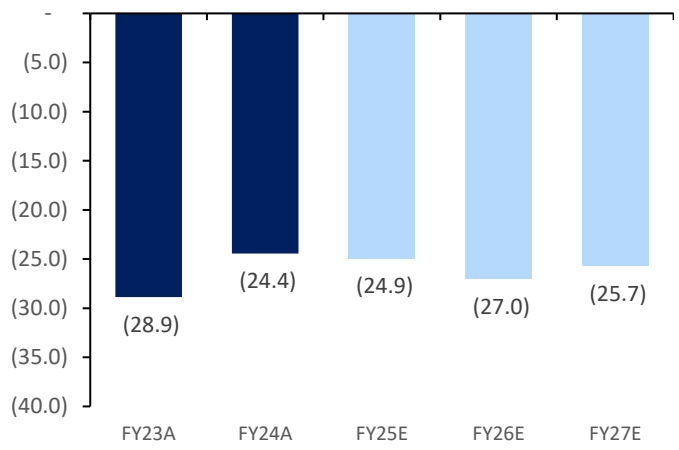
Source: Company reports, Trim Capital estimates

Figure 2: Operating Expenses ($m)



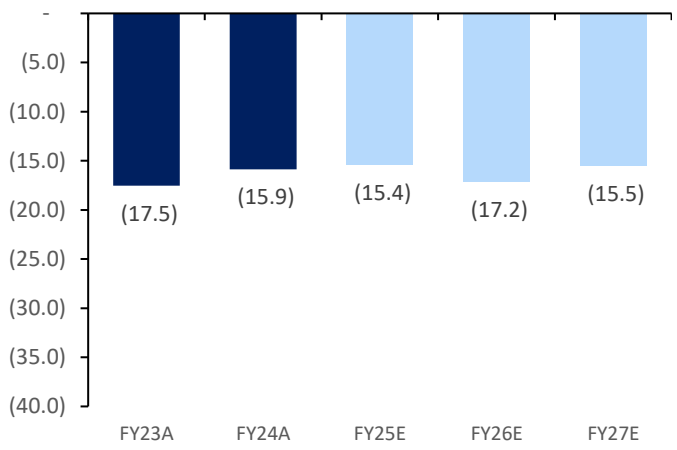
Source: Company reports, Trim Capital estimates

Figure 3: Net Profit ($m)



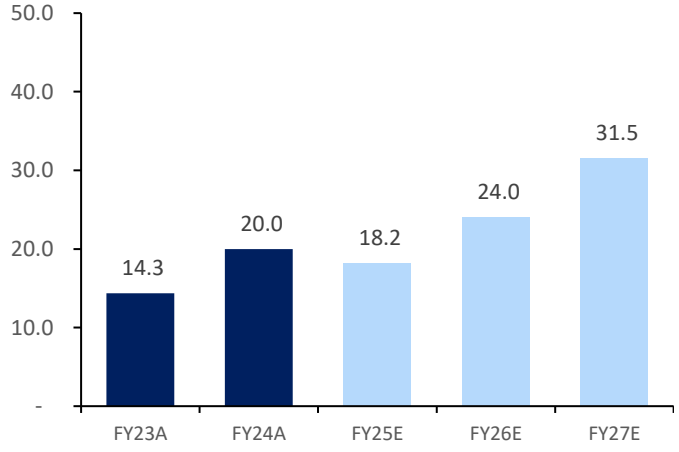
Source: Company reports, Trim Capital estimates

Figure 4: Operating Cash Flows ($m)



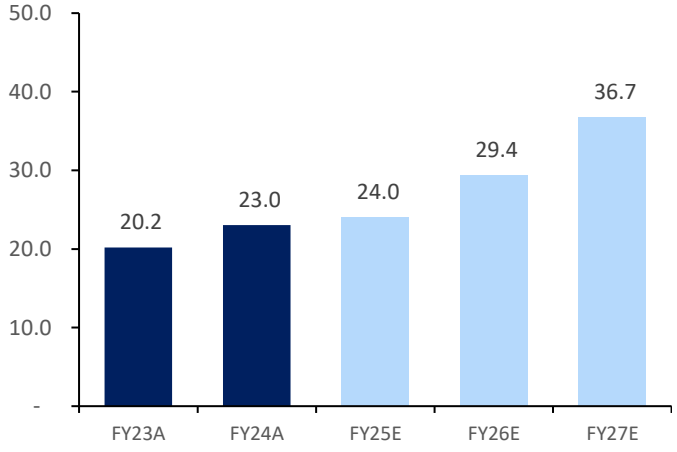
Source: Company reports, Trim Capital estimates

Figure 5: Cash balance ($m)



Source: Company reports, Trim Capital estimates

Figure 6: Total Assets ($m)



Source: Company reports, Trim Capital estimates

What's changed

Since our initiation report on 5 May 2025, there have been numerous developments involving the company and the industry, which we will discuss below:

1H25 performance

Brainchip released their half-year report for 1H25, which highlighted:

- **Revenues & Cash receipts:** BrainChip reported operating cash inflows $1.5m (in-line with expected $1.5m), mainly from engineering revenues from 3 customers (Front Grade Gaisler and AFRL contracts). Revenues recognised were $1.0m, lower than our expected $1.5m, which we think is due to timing.
- **Expenses & Cash payments:** Meanwhile, operating cash outflows/expenses were $9.3m (in-line with expected $9.2m), mostly comprising of R&D, staff costs, and advertising & sales.
- **Funding & Cash balances:** The company ended the quarter with $13.5m of cash balances, enough for 4 quarters of cash runway, considering a quarterly net cash burn of $3.8m. Due to this, they continue to rely on capital raising activities, mainly from the Put Option Agreement with LDA Capital. Latest funding of $5.6m (A$8.2m) was secured on 24 July 2025, with LDA Capital's exercise of the full capital call for 40 million shares at A$0.2059 per share. This gives Brainchip another 1-2 quarters of cash runway.

On-going deals

Over the past 2-3 quarters, Brainchip had secured revenue-contributing agreements, along with partnerships/collaborations that could potentially advance into licensing deals within the next year or two. We outline the key details of each deal below:

1. **Air Force Research Laboratory (AFRL)** is a scientific research and development detachment of the United States Air Force Materiel Command dedicated to leading the discovery, development, and integration of aerospace warfighting technologies, planning and executing the Air Force science and technology program, and providing warfighting capabilities to United States air, space, and cyberspace forces.
    - On 10 December 2024, Brainchip was awarded a $1.8m contract (paid over a 12-month period) by AFRL for the development of neuromorphic radar signaling processing technologies using the Akida 2.0 IP + TENNs framework. This was made under the SBIR program (AF242-D015), a US federal government program that funds research and development by small businesses to support government missions. Upon our research, application for the SBIR program started sometime in April 2024, indicating that the evaluation phase took 9 months until contract awarding.
    - On 1 April 2025, Brainchip entered into a sub-contractor agreement with Raytheon (NYSE:RTX), who will support the completion of the AFRL contract. This involves a fixed fee of $800k over the AFRL contract period.
2. **Frontgrade Gaisler** is a Swedish technology solutions provider for aerospace and defense industries. It is a subsidiary of Frontgrade Technologies, a global technology solutions provider with a 60-year history across various industries.
    - On 16 December 2024, Frontgrade Gaisler had commercially licensed Brainchip's Akida 1.0 IP for the development of space-grade System-on-Chip (SoC) solutions. This was roughly 8 months since the announcement of Frontgrade Gaisler's collaboration with Brainchip and evaluation of their IP. This deal was part of a larger program involving the European Space Agency (ESA) and their ESA Discovery Open Space Innovation Platform. Overall, Brainchip earned revenues of EUR150k (US$157k) upfront in 1Q25 and is set to earn royalties of 10% of net selling price of Frontgrade's first licensed product, in addition to maintenance fees that starts at year 2 of the contract (end-2026).
    - In April 2025, the Swedish National Space Agency (SNSA) awarded Frontgrade Gaisler a contract to commercialize the first neuromorphic SoC device for space applications. This device (Gr801 SoC), powered by Akida 1.0, is already being developed by Frontgrade. This endorsement and funding from SNSA increase the probability of a successful product development and eventual monetisation, benefitting Brainchip through royalties.
    - According to our research, development of a custom high-complexity SoC takes around 3-5 years. This means that we can expect some royalties to flow-in as early as 2027 or at most 2030.

3. **Onsor Technologies** is an Oman-based technology company that has developed various devices such as 3D laptops, tablets and wearables. To bring these technologies, they have partnered with zSpace (NASDAQ:ZSPC), a US-based provider of augmented and virtual reality solutions.
    - On 16 February 2025, BrainChip announced a technology collaboration partnership with Onsor for the development of wearable glasses with EEG sensors and neuromorphic processing capabilities that could predict epileptic seizures.
    - A look at Onsor's website showed that the aforementioned wearable glasses is called NEXA Solution. The product development project started in 2021 with a research collaboration between Sultan Qaboos University (SQU) and Intel Neuromorphic Research Community (INRC). It is currently under Phase 5.5, which involves clinical trials, development of the chip (which Brainchip will provide), and product improvements. The project timeline indicates a target of launching the product by 2026 (Phase 7.0).
4. **Information Systems Laboratories (ISL)** is a US-based company founded in 1982 that provides a wide range of technology solutions to clients and industries across the globe. Their core capabilities are around radar systems, AI & neuromorphic computing, DOD acceptance testing, nuclear regulatory services & systems analysis, and manufacturing of high-specifications hardware. The firm was founded and is currently run by professionals with long track records in the US Department of Defense.
    - On 1 April 2025, Brainchip announced a commercial partnership with ISL to develop advanced radar technology platforms spanning from drones to large systems. Dr. Joseph R. Guerci, ISL President and CEO said: "We have proven the efficacy of using BrainChip's Akida neuromorphic chip to implement some of the most challenging real-time radar/EW signal processing algorithms. This was accomplished by combining ISL's advanced RF Digital Engineering tools with BrainChip's developer's kit. This combination resulted in a low cost, size, weight and power solution for challenging edge computing applications in aerospace and defense."
    - It must also be noted that ISL was one of Branchip's first Early Access Program members and the formalisation of a technological partnership is a testament of the Akida's technological capabilities. While there is still uncertainty on how long they will come up with a product/solution (might take years), it is still an exciting prospect for Brainchip considering the background of ISL in military/defense solutions.
5. **Arquimea** is a Spanish-based company founded in 2005 that develops various technologies (AI, Quantum, Robotics) for Aerospace & Defense industries. Its clients include Lockheed Martin and Airbus.
    - On 16 April 2025, Brainchip announced a partnership with Arquimea for the development of low-power drones that could detect distressed swimmers and surfers, helping lifeguards scale their services for large beach areas. This technology uses Brainchip's Akida IP that is integrated with Prophesee's Metavision camera.
    - Details about this project could be found in Brainchip's website, including some footage that appears to be of drone tests using the said technologies. We expect it may take a year or less (given the trend on other deals) until we see an update or progress regarding this project, particularly if it advances into a licensing agreement.
6. **Andes Technology** is a Taiwanese company founded in 20025 that supplies low-power RISC-V processor IP solutions.
    - On 23 April 2025, they announced a collaboration that involves the integration of the Akida IP on the Andes QiLai Voyager platform, thereby expanding and demonstrating the use cases of both technologies/platforms.
    - We view as an initiative that expands the accessibility, adoption, and demonstrates the capabilities of the Akida IP.
7. **Chelpis Quantum Corp** is a Taiwanese company founded in 2017 that specializes in advanced chip design, cybersecurity, and post-quantum cryptography.
    - On 28 April 2025, Chelpis Quantum will purchase AKD1000 chips for assessment and deployment in endpoint security for robotic solutions, particularly through the development of an M.2 card that could be used for cryptographic security solutions. This project is a joint development effort with Chelpis partner company called Mirle (2464.TW) and has been formally submitted for consideration under Taiwan's chip innovation program, which aims to promote a new system-on-chip (SoC) integrating RISC-V, PQC, and NPU technologies, and will specifically support manufacturing markets that emphasize a Made-in-USA strategy.
    - We view this project as an immediate revenue contributor due to purchase of AKD1000 chips to assess its capabilities. This deal could result to further revenue upside if it advances into a licensing agreement.

8. **HaiLa Technologies** is a Canada-based fabless semiconductor and software company founded in 2019 that develops low-power multi-protocol radio communication for IoT devices.
    - On 24 June 2025, they announced a partnership to jointly develop solutions for IoT, medical, and smart infrastructure markets. The Akida IP was paired with HaiLa's BSC2000 radio frequency integrated circuit (RFIC) to enable breakthrough power efficiency for connected sensor applications. They demonstrated these technologies in the Sensors Converge 2025 event held on June 24-26 in Santa Clara, California, USA.
    - We expect it may take a year or less (given the trend on other deals) until we see an update or progress regarding this project, particularly if it advances into a licensing agreement.

Increasing Edge AI adoption

Brainchip's team had been firing on all cylinders, having secured deals involving technologies that could be applied to different industries such as consumer, enterprise, aerospace and defense. These are good indications that the company would be able to ride the on-going wave or cycle of investment into Edge AI. Some notable industry developments to note are:

- **Industrial / logistics environments:** For the past 3 months, industrial giants such as A.P. Moller – Maersk (CPH:MAERSK) and Schlumberger (NYSE:SLB) have tapped ZEDEDA as their key technological provider for their implementation and transition into Edge AI / IoT platforms. Zededa is a provider of edge management and orchestration software which simplifies security, remote management, and deployment of edge infrastructure and applications at scale. Meanwhile, Cisco Systems (NASDAQ:CSCO) has partnered with Sima.ai to promote edge AI adoption in industrials. In particular, the combined offerings of hardware switches (Cisco) and AI platform (Sima.ai) are targeted at production-grade edge AI solutions across manufacturing, logistics, and industrial automation use cases.
- **Smart-city applications:** Over the past quarter, Blaize Technologies (NASDAQ:BZAI), a US-based company that uses neural computing for its edge AI chips (similar to Brainchip) was able to secure a US$120m deal to deploy their solutions for smart city applications in Asia (through Starshine Computing, a HK-based company). They also secured a smart-city application deal with South Korean institute called Chungbuk Institute of Science and Technology (CBIST). To note, a key difference between Brainchip and Blaize is their business model, wherein the former focuses on IP licensing while the latter is on production of hardware/chips.
- **Telecommunications:** On 26 June 2025, Japanese firms Rakuten, AWL and Vissel Kobe have collaborated for an edge AI project that aims to optimize communication loads in large-scale venues. The project brings together intelligent camera systems (AWL), advanced network infrastructure (Rakuten Mobile), and cutting-edge AI algorithms. These technologies will be tested at Noevir Stadium Kobe, home to the professional soccer team, Vissel Kobe, a member of the Rakuten Group. While digital transformation and AI-based automation offer viable solutions, applying cloud-based AI for surveillance in large spaces, such as stadiums, presents difficulties since volume of video data transmission can strain communication networks, raise operational costs and exposing infrastructural limitations.
- On 11 July 2025, SK Telecom (Korean telecom provider) has released a new compact AI language model called AX 3.1 Lite, which is designed to run directly on smartphones and other small devices, where power and memory are more limited. It is part of a wider effort by the company to develop AI tools that run closer to users, without needing a constant connection to cloud servers.
- Increasing discussions about prospects of Edge AI agents, which are autonomous systems operating directly on endpoint devices. It is a fusion of the two key technology concepts of 'AI agents' and 'edge computing'. By running AI agents directly on edge devices (smart phones, cameras, sensors), we are unlocking a new class of applications that are faster, more reliable, and more secure, effectively moving AI from the cloud (data centres) into the physical world.

Forecasts revisions

We made the following changes:

- Incorporated 1H25 actual figures;
- Adjustments to 2H25E forecasts, which are based on latest actuals (1H25);
- Adjustments to FY26E and FY27E based on FY25E trends (particularly lower-than-expected share-based payments);

Figure 7: Forecast Changes

		FY25E			FY26E			FY27E		
		Old	New	% chg	Old	New	% chg	Old	New	% chg
Revenues	**$m**	**2.8**	**2.7**	**(4.4%)**	**3.9**	**3.8**	**(2.8%)**	**7.2**	**7.1**	**(1.5%)**
Cost of Sales	$m	(0.6)	(1.1)	(92.4%)	(0.8)	(0.8)	2.8%	(1.4)	(1.4)	1.5%
Research & Development	$m	(7.4)	(7.2)	3.2%	(8.1)	(7.8)	3.7%	(8.6)	(8.3)	3.8%
Selling & Marketing	$m	(4.9)	(4.6)	6.7%	(5.3)	(5.0)	6.6%	(5.5)	(5.2)	6.6%
General & Administrative	$m	(6.2)	(7.5)	(21.6%)	(6.5)	(8.0)	(22.5%)	(6.4)	(8.0)	(25.8%)
Share-based Payments	$m	(13.7)	(7.9)	42.5%	(15.2)	(9.3)	38.6%	(16.1)	(9.9)	38.6%
EBITDA	$m	(29.4)	(25.0)	15.0%	(31.4)	(26.5)	15.7%	(30.7)	(25.4)	17.1%
Reported NPAT	**$m**	**(30.0)**	**(24.9)**	**16.9%**	**(32.0)**	**(27.0)**	**15.5%**	**(30.9)**	**(25.7)**	**16.7%**
Cash NPAT	$m	(15.7)	(16.1)	(2.6%)	(16.2)	(17.2)	(5.7%)	(14.6)	(15.5)	(6.6%)
Operating cash flow	$m	(16.8)	(15.4)	8.0%	(16.2)	(17.2)	(5.7%)	(14.6)	(15.5)	(6.6%)
Investing cash flows	$m	(0.1)	(0.1)	23.4%	(0.1)	(0.1)	23.4%	(0.1)	(0.1)	23.4%
Financing cash flows	$m	6.6	13.2	99.5%	23.1	23.1	–	23.1	23.1	–
Cash balance	**$m**	**10.8**	**18.2**	**69.1%**	**17.5**	**24.0**	**37.3%**	**25.9**	**31.5**	**21.6%**

Source: Trim Capital estimates

Investment Thesis

- **Potential game-changer for Edge AI adoption:** Brainchip's neuromorphic technology can handle complex computations and enable AI applications, but at a lower power consumption and little-to-no reliance on cloud infrastructure. These capabilities are essential for Edge AI, which is the next area of growth given it could solve the constraints of current cloud AI infrastructure such as costly processors (NVIDIA GPUs), bandwidth, storage, and energy costs (5G, data centres). The Akida platform had been explored by NASA, US Air force (AFRL), Mercedes Benz and was eventually licensed by companies in semiconductor (Renesas Electronics, MegaChips) and space (Frontgrade Gaisler) industries. However, these haven't translated to recurring revenues (royalties) since no end-product has yet been developed by its licensees. The company has developed a newer version of their technology (Akida 2.0) and is showing promising results as they secured recent contract wins from AFRL, Frontgrade and Bascom Hunter.
- **Strong management execution and expertise:** Despite challenges in commercialisation, funding, and retirement of co-founders, Brainchip was able to advance the development of their technology, secured research/licensing deals, and attracted key personnel with extensive background in semiconductors, AI, robotics, and experience with companies such as Qualcomm, HP, IBM, Intel, and ARM Holdings. This was driven by the company restructuring and rebranding in 2022, which involved the onboarding of a new CEO and development of a new approach to marketing and commercialisation.
- **Potential acquisition target:** There has been increasing investments being made into Edge AI and neuromorphic computing in recent years. An established company (i.e. ARM Holdings, NVIDIA, Intel, Samsung etc) looking to expand into these fields may acquire BrainChip, given the capabilities and potential of the Akida IP platform. We see ARM Holdings as potential acquirer due to its size, resources, proximity/affiliation, and similarity in business model. Consumer electronics, automotive, and IoT are industries that ARM operates in but has less than 50% market share; These are industries where Edge AI is likely to be applied and BrainChip's technology may be the one of the avenues for ARM to further penetrate this field.

Catalysts

	Expectation	Timing
Licensing Deals	• Ongoing negotiations with partners and potential clients are expected to yield some licensing wins with the efforts of the new CMO and S&M team	• We expect it could happen over the next 12 months and well into the following years.
Akida Development Roadmap	• Brainchip continues to advance the Akida platform's capabilities, adoption, and use cases across different industries through the introduction of newer versions and reference designs.	• We expect newer versions (i.e. Akida 3.0, 4.0) to be announced soon.
Edge AI model development	• Brainchip's new architecture called Temporal Event-based Neural Networks (TENNs) will help in the development of Edge AI models across the Akida platform, given its low power consumption despite heavy computational capabilities.	• Brainchip introduced TENNs in Jun 2024 and has garnered interest in recent deals. We expect this momentum to continue over the following months.
Edge AI adoption	• We are seeing more companies increasingly invest into developing the Edge AI environment to solve current constraints and complement the existing Cloud AI infrastructure.	• We expect rapid growth in Edge AI adoption over the next few years as more companies explore the use of AI in end-point devices such as smartphones, security cameras, wearables, etc.

SWOT Analysis

Internal

Positive

Strengths

- **Proven capability in neuromorphic computing.** BrainChip is ahead of others when it comes to research & development and commercialisation on neuromorphic computing, considering the licensing and R&D deals they have with prominent semiconductor, automotive, space companies, and government agencies.
- **Knowledge & Expertise.** BrainChip has a strong management team and board of directors with extensive background in the field of robotics, semiconductors, AI, and experience from firms such as Arm, HP, Qualcomm, and Intel.

Weakness

- **Negative profitability & cash flows.** The company currently has limited revenues as it is still actively working on commercialising its products while improving its technology. It currently relies heavily on funding from LDA capital, institutional & retail investors (through share offers) to finance its R&D, and day-to-day operations.
- **Long monetisation timeline.** Upon licensing of BRN's IP, it may take a few years (2-5) until the licensee is able to manufacture the products and reach a scale of production that will enable BRN to realise substantial royalty revenues.
- **Limited hardware sales.** BrainChip has a hard time commercialising their IP platform due to a lack of hardware that are readily marketable or implemented to prospective customers' / licensees' products.

Opportunities

- **Edge AI adoption.** It is widely anticipated that the Edge AI industry will grow in the coming years due to constraints of the current AI infrastructure, with its reliance on cloud and data centres that brings various issues in terms of connectivity, data security, costs efficiency, etc.
- **Adoption of Neuromorphic technologies.** There have been a lot of studies & research done in the last 20 years over neuromorphic computing and the industry is just waiting for the opportune time for the technology to be applied to existing systems, which will depend on a compelling use case or application.

Threats

- **Competition.** While BrainChip maybe the first-to-market in terms of technology or capabilities, they may fail to capitalise on the opportunity due to lack of resources since there are numerous companies pursuing opportunities in Edge AI and neuromorphic computing that have greater resources and capital.
- **Degree & pace of adoption.** While there are significant opportunities in Edge AI and neuromorphic computing, it is highly uncertain as to when and how much the world will transition into this next phase, considering that a lot of resources have already been put into existing infrastructure (cloud AI).

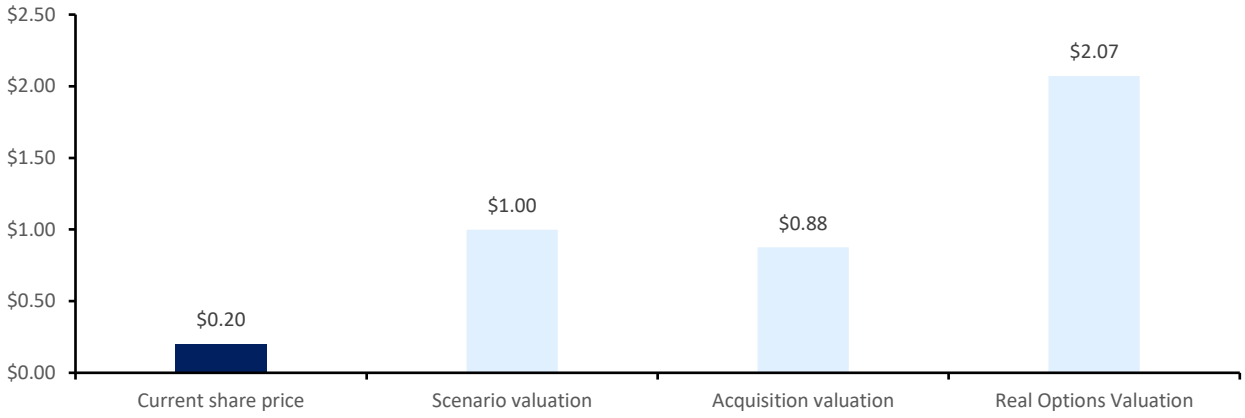
Negative

External

Valuation

We value Brainchip at A$1.00, using a scenario valuation as our primary methodology. We made no changes to our valuation estimates since 1H25 results were mostly within expectations and there haven't been any additional licensing deals signed that was beyond our expectations (2 per year). Nevertheless, there's significant upside from the current share price to our valuation and validation approaches, particularly at +399% under scenario approach, +338% using M&A comparables approach, and +935% under the real options approach. We note that at the current share price, BRN is trading at a 13x premium relative to FY24 NAV and 13x relative to FY24 NTA.

Figure 8: Valuation approaches (A$ per share)

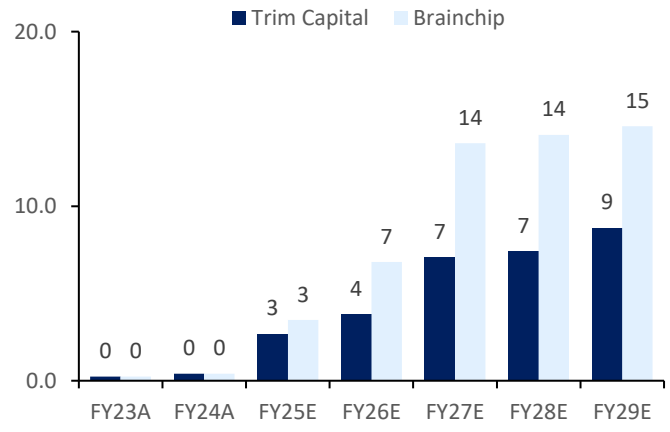


Source: Trim Capital estimates

Scenario Valuation

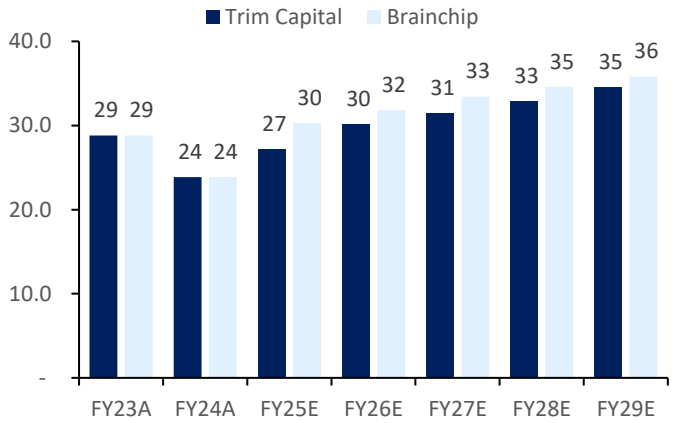
We valued Brainchip using a discounted cash flow (DCF) methodology under several scenarios with certain assumptions regarding (i) number and timing of licensing deals, (ii) timing, pricing, and penetration of products developed using BrainChip's technology/IP, (iii) timing and extent of adoption of neuromorphic processing technology, and (iv) timing and extent of development of Edge AI ecosystem. First, we expect that BrainChip will be able to secure several licensing agreements in the next 5 years, specifically at 1 – 2 licensing deals per year with contract values ranging from $1.0m to $4.0m. Our forecasts are lower than what BRN management expects over the next 5 years, which has been implied in their revenue assumptions used in their impairment testing for intangible assets (See FY24 Financial Report). Second are operating expenses, which are predominantly employee & executive compensation. We forecasted these to grow by a CAGR of +7.7% over the next 5 years, slightly lower than what BRN management expects which is at a 5-year CAGR of +8.4%. With just these, one can already determine that BRN is expected to run at significant loss and cash burn over the next 5 years and will likely need some further investor funding / raises.

Figure 9: Revenue Forecast ($m) – Trim Capital vs Brainchip



Source: Company reports, Trim Capital estimates

Figure 10: Opex Forecast ($m) – Trim Capital vs Brainchip



Source: Company reports, Trim Capital estimates

Until BrainChip earns any royalties from its licensing agreements, then it is expected to run at a net loss. However, there is significant uncertainty as to when this will happen since it also depends on how long it will take the licensees to develop and manufacture their products that use the Akida IP. According to BRN management, it could take a minimum of 2-3 years for simpler consumer applications or 5-10 years for more complex industries such as automotive, industrial, etc. Hence, we developed several scenarios as to the timing of royalty revenues. Our valuation largely hinges on the prospects after 5 years (2030 onwards), since we don't expect any current licensees to have any products developed/launched within the next 5 years (there hasn't been any significant activity in terms of product development with regards to licensees Renesas and MegaChips, according to BrainChip).

Bull Case	Base Case	Bear Case
Our bull scenario assumes that BRN: • Clients' product development and manufacturing take 5 years since licensing agreement (starts 2030) • Net selling price of client product is $10 per unit and Royalty revenues are 5% of net selling price per unit • Units manufactured steadily ramp-up on a yearly basis until in Year 20 (2044) it reaches a total annual production of 27.5bn chips, which is roughly equal to the number of chips shipped by Arm Holdings in 2024 (28.6bn). • Revenues are $48m by year 10 (2034), $1.0bn by year 15 (2039), and $13.7bn by year 20 (2044). • Assuming these revenues along with operating expenses growing at a CAGR of +5.0%, the estimated equity value of BRN is **$2.5bn** or **$1.22** per share (A$1.93).	Our base scenario assumes that BRN: • Clients' product development and manufacturing take 8 years since licensing agreement (starts 2033) • Net selling price of client product is $10 per unit and Royalty revenues as 5% of net selling price per unit • Units manufactured steadily ramp-up on a yearly basis until in Year 20 (2044) it reaches a total annual production of 6.8bn chips, which is 24% of the number of chips shipped by Arm Holdings in 2024 (28.6bn). • Revenues are $3m by year 10 (2034), $195m by year 15 (2039), and $3.4bn by year 20 (2044). • Assuming these revenues along with operating expenses growing at a CAGR of +5.0%, the estimated equity value of BRN is **$421m** or **$0.208** per share (A$0.327).	Our bear scenario assumes that BRN: • Clients' product development does not succeed and BRN earns no royalty revenues. • Operating expenses continue to grow at a CAGR of +5.0%, the estimated enterprise/equity value of BRN (using a DCF approach) is -**$187m** or -**$0.09** per share -(A$0.145).

Key assumptions used in each scenario:

- ARM's chip production in FY24 was used as a basis for target market share due to its significant global market share and IP deployment in sectors of mobile, consumer, and IoT, which are markets that Edge AI will likely penetrate.
- WACC was calculated using a risk-free rate of 4.0%, beta of 1.5x, equity risk premium of 5.0%, and an additional risk premium of 10.0% (due to huge uncertainty in the prospects of company's technology). This resulted to a cost of capital of 21.5%, which is roughly equal to the 21.8% discount rate used by BrainChip in the value-in-use methodology in the impairment of their intangible assets in FY24.
- Terminal value was calculated at the end of Year 20, where a 3.5% terminal growth rate was applied on both revenue and costs.

Results of the scenarios outlined above show that the timing of royalty revenues have a significant impact on valuation, since the difference between bull and base case is just the timing of product launch/royalty realisation. To come up with a final valuation, we took the weighted average of the assumed probability of each scenario and the calculated valuation of each scenario. We deemed that the probability of a bear case is 10% due to our consideration for the past & recent licensing and development deals secured by the company (which is a testament to viability of the Akida platform), continuous improvements in technology (newer versions of Akida), and the strong execution that management had demonstrated in the last 2 years.

Figure 11: Summary Results of Scenario Analysis

Per Scenario		Bull	Base	Bear
Revenue by Year 20 (2044)	$m	13,750	3,400	0
Equity Value / Mkt Cap	$m	2,480	421	0
WACC	%	21.5%	21.5%	21.5%
Target Share Price	$	1.225	0.208	(0.092)
Target Share Price	A$	1.923	0.327	(0.145)
Upside / (Downside)	%	861%	63%	(100%)
Probability	%	45%	45%	10%
Weighted Average Valuation				
Average Market Cap	$m	1,287.0		
Average Target Price	$	0.64		
Average Target Price	A$	1.00		
Upside / (Downside)	%	399%		

Source: Trim Capital estimates

Sensitivity Analysis

The following table illustrates the effect on BRN's valuation from possible changes in assumptions, all else equal. Our findings indicate that the variables with high impact on valuation are (i) WACC, (ii) timing of royalty realisation, and (iii) the net selling price of the licensed product. Ultimately, variables ii and iii will depend on which industry does the licensees operate on.

Figure 12: Sensitivity Analysis

# of years before royalties realization		5	6	7	8	9
Share price ($)		1.225	0.759	0.424	0.208	0.081
$ Difference			(0.47)	(0.33)	(0.22)	(0.13)
% change			-38%	-44%	-51%	-61%
Change in royalty rate %	Bull	3.00%	4.00%	5.0%	6.00%	7.00%
Share price ($)		0.698	0.961	1.225	1.488	1.751
$ Difference		(0.26)	(0.26)		0.26	0.26
% change		-27%	-22%		22%	18%
WACC %	Bull	17.50%	19.50%	21.50%	23.50%	25.50%
Share price ($)		2.822	1.842	1.225	0.825	0.561
$ Difference		0.98	0.62		(0.40)	(0.26)
% change		53%	50%		-33%	-32%
NSP ($)	Bull	5.0	7.5	10.0	12.5	15.0
Share price ($)		0.566	0.895	1.225	1.554	1.883
$ Difference		(0.33)	(0.33)		0.33	0.33
% change		-37%	-27%		27%	21%
Opex CAGR (%) (FY30 onwards)	Bull	2.62%	3.43%	4.25%	5.10%	6.00%
Share price ($)		1.229	1.227	1.225	1.222	1.220
$ Difference		0.00	0.00		(0.00)	(0.00)
% change		0%	0%		0%	0%

Source: Trim Capital estimates

Relative Valuation

We analysed the semiconductor industry for listed companies with a similar business models to that of BrainChip and identified around 12 companies. An analysis of their financials and multiples indicate that valuations differences are driven by factors such as geography, technology, target market, company size and profitability.

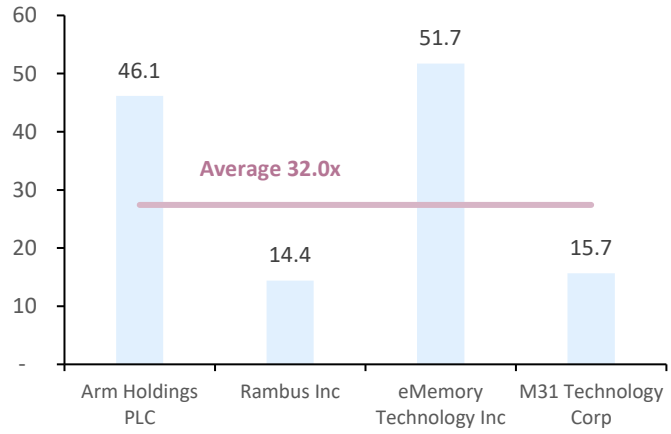
Figure 13: Selected comparable companies of Brainchip (as of 9 September 2025)

Identifier (RIC)	Company Name	Country	Market Cap ($m)	Assets ($m)	Revenue ($m)	EBITDA ($m)	P/B (x)	P/S (x)
BRN.AX	BrainChip Ltd	Australia	267	23	0	(23)	13	672
WBT.AX	Weebit Nano Ltd	Australia	348	44	1	(29)	8	522
4DS.AX	4DS Memory Ltd	Australia	14	6	0	(3)	3	53
ARM.OQ	Arm Holdings Plc	UK	149,144	7,927	3,233	279	28	46
CEVA.OQ	CEVA Inc	US	546	309	107	(3)	2	5
RMBS.OQ	Rambus Inc	US	8,021	1,343	557	218	7	14
QUIK.OQ	Quicklogic Corp	US	89	52	20	(3)	4	4
6533.TW	Andes Technology	Taiwan	511	174	34	0	3	15
3529.TWO	eMemory Technology Inc	Taiwan	5,810	136	112	67	53	52
6643.TWO	M31 Technology Corp	Taiwan	724	66	46	4	12	16
432720.KQ	Qualitas Semiconductor	Korea	142	31	8	(7)	7	17
394280.KQ	Openedges Technology	Korea	205	35	15	(11)	13	14
3652.T	Digital Media Professionals	Japan	45	26	20	3	2	2
	Average (excl. BRN, WBT, 4DS)						**13**	**19**
	Median (excl. BRN, WBT, 4DS)						**7**	**15**

Source: Refinitiv, Trim Capital estimates

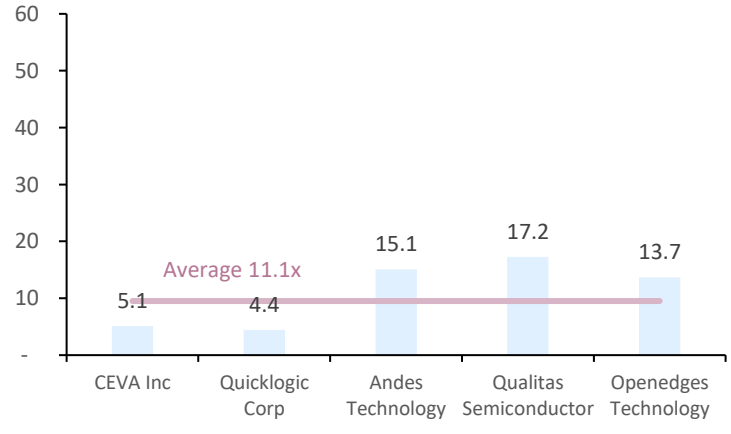
- In the Australian market, BRN has similar valuation [market cap, P/B] with companies like WBT and 4DS that are pre-revenue and offer IP licensing services. Although we note that there are differences in their target markets, with WBT and 4DS being in memory technologies (RAM) while BRN is in computing/processors (NPU).
- Peer companies with higher scale (revenues >$50m) and/or are profitable (ARM, RMBS, eMemory, M31) are trading at higher multiples, typically at P/B of >10x and P/S of >15x. (See Figure 14)
- Peer companies with lesser scale (revenues <$50m) and/or unprofitable (CEVA, QUIK, Andes, Qualitas) are trading at lower multiples, typically P/B of <7x and P/S of <15x. (See Figure 15).

Figure 14: FY24 P/S multiples – Profitable peers



Source: Refinitiv, Trim Capital estimates

Figure 15: FY24 P/S multiples – Unprofitable peers



Source: Refinitiv, Trim Capital estimates

Acquisition valuation

We analysed M&A transactions from 2018 to 2025 and found several transactions that are comparable to Brainchip's business (IP licensing), target market (Edge AI), and industry (semiconductors).

- Of particular interest is **Habana Labs**, which was acquired by Intel Corp in 2019 for a total of US$2.0bn, the highest valuation paid for a company that is comparable to Brainchip. At that time, Habana Labs held a lot of promise considering it was developing AI processors optimised for the rising demand in data centre applications. However, it failed to deliver results as the Gaudi chips released by Intel (using the Habana technology) failed to get any traction in the market and resulted to layoffs and cost-cutting within the unit. Originally, Intel aimed to generate $1 billion in annual Gaudi chip sales by 2024. This target was later halved and eventually abandoned due to delays in software integration and supply chain disruptions. Considering the issues faced by Intel through the acquisition, we believe a similar valuation would be hard to achieve by Brainchip in an acquisition scenario.
- **Syntiant Corp** appears to be a company involved in neural/neuromorphic computing for Edge devices. A minority stake acquisition in 2023 implies that the company may be valued at around US$282m-$1.13bn, assuming it was between a 5%-20% stake. This valuation range is comparable to Brainchip's current market cap of US$271m and our calculated weighted-average scenario valuation of US$1.29bn.
- Next is **Blaize**, a US-company developing Edge AI chips that had went public in January 2025 through a SPAC merger. At that time, it had a valuation of US$1.2bn. While the company was still operating at a significant loss, we think that the valuation was driven by optimism for its deal pipeline and prospects of its offerings.
- A more comparable transaction is the acquisition of **Kinara**, a US-company focused on developing Edge AI chips. They were acquired in February 2025 by NXP Semiconductors, who was already an existing partner of Kinara since 2022, for US$317m. This is a bit higher than BRN's current market cap of US$245m.
- Based on the Syntiant, Blaize, and Kinara transactions (made in 2022-2025), we could presume that a company in the semiconductor IP, neuromorphic computing, or Edge AI industries would have a deal valuation of around **US$250m - US$1.2bn**. We believe the valuation differences largely depends on investor outlook for their key technologies. Assuming a US$1.2bn valuation, the implied target price is A$0.93/share, a +338% upside from current share price.

Figure 16: Comparable M&A transactions

Date	Target	Acquirer	Value (US$)	Stake (%)
16-Dec-19	**Habana Labs** was an Israel-based company that developed Artificial Intelligence (AI) processors for the specific needs of training deep neural networks and for inference deployment in production environments.	Intel	2,000	100%
1-Sep-23	**Syntiant Corp** was a US-based technology company engaged artificial intelligence and machine learning for edge devices. The chip solutions merge deep learning with semiconductor design to produce neural network processors for always-on applications in battery-powered devices, such as hearing aids, earbuds, smart speakers, and mobile phones.	Undisclosed	56.4	minority
13-Jan-25	**Blaize** is a US-based technology company that manufactures Edge AI chips. Launched in 2011 by former Intel engineers, Blaize has raised $335 million from investors like Samsung and Mercedes-Benz. In 2023, it earned US$3.8m of revenues and had US$87.5m in losses. However, they are expecting $400m in deals in the pipeline, which is maybe why they are estimated to have a US$1.2bn of valuation after the completion of the SPAC merger with BurTech Acquisition Corp.	BurTech Acquisition	1,200	100%
10-Feb-25	**Kinara** is a US-based technology company that develops AI accelerator chips (NPUs) and related software suited for edge computing workloads. Founded in 2013, they launched the first product ARA-1 Edge AI processor in 2020. This was eventually followed in December 2023 by Ara-2, which was 5-8x faster than its predecessor.	NXP Semiconductors	307	100%

Source: Refinitiv, Trim Capital estimates

Real Options Valuation

Given the significant uncertainty in the variables that could affect the valuation, we applied an alternative and supporting methodology called real options valuation. It uses underlying assumptions from the Black-Scholes model and is typically used for valuing highly uncertain/speculative companies like biotechnology firms. Under this, we used the following inputs:

- PV of cash flows expected to be earned from licensing & royalties over the next 20 years under the bull case ($2.68bn)
- Standard deviation of PV of cash flows (100%)
- PV of operating expenses over the next 20 years for development and commercialisation ($201m)
- Estimated life of patents (20 years)
- Risk free rate (4%)

This methodology resulted to an estimated valuation of $2.67bn, which is roughly in-line with the valuation derived under the bull case from the scenario analysis. This implies a target price of $1.32 (A$2.07) which provides an expected 935% upside to the current market price.

Risks

As with any investment, there are certain risks associated with operations as well as the surrounding economic and regulatory environments common to the industry. The Australian Institute of Company Directors encourages directors to think about risks under a strategic, financial and operational category framework.

Figure 17: Key risks per category

Strategic	Financial	Operational
Dynamic and changing market - While there are significant opportunities in Edge AI and neuromorphic computing, it is highly uncertain as to when and how much the world will transition into this next phase, considering that a lot of resources have already been put into existing infrastructure (cloud AI). Any variance between timing and degree of adoption will have significant consequences to BrainChips future outlook and financials.	**Macroeconomic conditions** – Given the current environment's high interest rates, elevated inflation, and slowing economic growth, investors and businesses may be averse to investing in R&D and highly uncertain ventures such as technology that will take years to be commercialised. This lessens BrainChips probability of securing licensing deals and funding for their operations.	**Key personnel** – The company maybe unable to retain its key talent due to its limited resources and high uncertainty of commercialisation. Any departure of key personnel may delay the development and commercialisation of the company's key technologies.
Competition - While BrainChip maybe the first-to-market in terms of technology or capabilities, they may fail to capitalise on the opportunity due to lack of resources since there are numerous companies pursuing opportunities in Edge AI and neuromorphic computing that have greater resources and capital.	**Liquidity and funding risks** - The company has limited revenues as it is still actively working on commercialising its products while improving its technology. It currently relies heavily on funding from LDA capital, institutional & retail investors (through share offers) to finance its R&D, and day-to-day operations.	**Business Model** - BrainChip has a hard time commercialising their IP platform due to a lack of hardware that are readily marketable or implemented to prospective customers' / licensees' products.
	Long monetisation cycle - Upon licensing of BRN's IP, it may take a few years (2-10) until the licensee is able to manufacture the products and reach a scale of production that will enable BRN to realise substantial royalty revenues.	**Litigation, claims and disputes** – Since they engage through long-term contracts and agreements for the licensing of its intellectual property, the company is highly exposed to legal risk. They may also incur significant expenses to enforce their intellectual property against competitors that might infringe on their rights, considering the market potential.

Source: Company reports, Trim Capital estimates

Environmental, Social & Governance

Lower carbon footprint due to power efficiency

As a company, Brainchip has very low carbon emissions since they mainly focus on research and development activities for the Akida platform while the production of reference designs and hardware is mostly outsourced from partners.

As for the technology, Brainchip's Akida platform promotes environmental sustainability through its power efficiency, particularly the ability to process complex computations essential to developing and training AI models but with a significantly lower power consumption. This fits well into the promise of Edge AI, which is to reduce reliance on data centre infrastructure that have extensive carbon footprint through high energy/electricity consumption and need for extensive space for the infrastructure.

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