

## 1. Company details

Name of entity:	4DS Memory Limited
ACN:	145 590 110
Reporting period:	For the half-year ended 31 December 2023
Previous period:	For the half-year ended 31 December 2022

## 2. Results for announcement to the market

			\$
Revenues from ordinary activities	up	1060.1% to	165,007
Loss from ordinary activities after tax attributable to the owners of 4DS Memory Limited	down	37.5% to	(1,780,378)
Loss for the half-year attributable to the owners of 4DS Memory Limited	down	37.5% to	(1,780,378)
		<b>31 December 2023</b>	<b>31 December 2022</b>
		<b>Cents</b>	<b>Cents</b>
Basic earnings per share		(0.10)	(0.19)
Diluted earnings per share		(0.10)	(0.19)

### Dividends

There were no dividends paid, recommended or declared during the current financial period.

### Comments

The loss for the Group after providing for income tax amounted to \$1,780,378 (31 December 2022: \$2,848,733).

## 3. Net tangible assets

	Reporting period Cents	Previous period Cents
Net tangible assets per ordinary security	<u>0.60</u>	<u>0.35</u>

## 4. Dividends

### Current period

There were no dividends paid, recommended or declared during the current financial period.

### Previous period

There were no dividends paid, recommended or declared during the previous financial period.

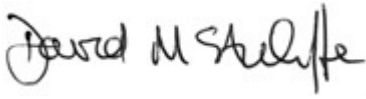
## 5. Audit qualification or review

This report is based on the consolidated financial statements for the half-year ended 31 December 2023 which has been reviewed by PKF Perth.

## 6. Attachments

The Interim Report of 4DS Memory Limited for the half-year ended 31 December 2023 is attached.

7. Signed



Signed \_\_\_\_\_

Date: 21 February 2024

David McAuliffe  
Executive Chairman  
Authorised for release by the Board

For personal use

# **4DS Memory Limited**

**ACN 145 590 110**

**Interim Report - 31 December 2023**

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The Directors present their report, together with the financial statements, on the consolidated entity (referred to hereafter as the 'Group') consisting of 4DS Memory Limited (referred to hereafter as the 'Company') and the entities it controlled at the end of, or during, the half-year ended 31 December 2023.

### Board of Directors

The following persons were directors of 4DS Memory Limited during the whole of the financial half-year and up to the date of this report, unless otherwise stated:

Mr. David McAuliffe	Executive Chairman from 18 September 2023 Executive Interim Chairman from 14 February 2023 to 17 September 2023
Mr. Howard Digby	Non-Executive Director
Dr. Guido Arnout	Non-Executive Director

### Principal activities

4DS Memory Limited (**ASX: 4DS**), with facilities located in Silicon Valley, is a semiconductor company pioneering the development of a persistent memory technology known as Interface Switching ReRAM, for next-generation gigabyte Storage Class Memory. Established in 2007, 4DS owns a patented IP portfolio, comprising 34 USA patents granted which have been developed in-house to create high-density Storage Class Memory. 4DS has a joint development agreement with Western Digital subsidiary HGST, a global storage leader and a development agreement with Belgium-based imec - a world leading research and innovation hub in nanoelectronics and digital technologies.

### Dividends

There were no dividends paid, recommended or declared during the current or previous financial half-year.

### Review of operations

#### Financial Review

The loss for the Group after providing for income tax amounted to \$1,780,378 (31 December 2022: \$2,848,733)

#### Corporate changes

On 1 December 2023, the Company appointed Mr Peter Himes as a strategic advisor to the Board.

#### Operating Review

On 3 July 2023, the Company announced that imec had successfully completed the manufacture of the Fourth Platform Lot and shipped the Lot to 4DS facilities in Fremont, California.

On 23 August 2023, the Company announced that, as a consequence of all the development activities which had taken place since 5 October 2022, it had now demonstrated the successful transfer of all new process improvements and learning cycles developed at the Stanford Nanofabrication Facility into imec's megabit array. These process improvements included modification of the PCMO etch process and the composition of the memory cells, and it validated that the technology optimization was transferable from fab to fab. After extensive analysis 4DS showed, for the first time, a fully functioning megabit array with 60nm memory cells, access transistors and write circuitry.

- Read and write speeds at 27 nanoseconds;
- Endurance well in excess of 2 billion cycles; and
- Retention is persistent and tuneable.

The results seen were significant as they were on a known and well understood megabit array from imec. Upon achieving this Company milestone, further analysis and strategic planning was conducted.

On 18 September 2023, the Company successfully completed further analysis of the Fourth Platform Lot and the results obtained were significantly better as compared to results announced on 23 August 2023.

The Company confirmed that following additional testing within the megabit array 4DS had shown:

- Write speeds at 9.5 nanoseconds which were significantly superior to DRAM
- Endurance in excess of 3 billion cycles
- DRAM read speed; and
- Retention is persistent and tuneable

4DS's ReRAM performance profile to suitably meet these outcomes had again been clearly demonstrated on the Fourth Platform Lot via the additional testing.

On 10 and 11 October, following the success of 4DS's Fourth Platform Lot, 4DS' Board members and Chief Technology Officer met with imec's Chief Operating Officer and a number of senior imec personnel in Belgium for lengthy strategic discussions and a tour of imec's facilities.

On 29 November 2023, 4DS and imec finalised the terms of the collaboration extension which commenced on 1 January 2024 and runs to the end of the same year. 4DS and imec agreed to additional collaboration activities to be undertaken during 2024. The consideration for all collaboration activities is 1.92 million Euro.

Also on 29 November 2023, 4DS announced that process optimization and short loop analysis will take place into early 2024. The Fifth and Sixth Platform Lots will again be manufactured on imec's unique Dory platform on 60nm and significantly for the first time 20nm memory cells. Manufacturing of the Fifth and Sixth Platform Lots will commence during Q1 2024 and Q2 2024 respectively with delivery to 4DS expected during Q3 2024. The Fifth Platform Lot is seeking to further optimise the unique characteristics of the results already seen on the 60nm memory cells prior to undertaking manufacturing of the Sixth Platform Lot on 20nm memory cells.

On 1 December 2023, Mr Peter Himes was appointed as a strategic advisor to the 4DS Board. Peter is an experienced senior executive in high growth technology firms, with extensive general management responsibilities. He is agile at building winning teams, defining and addressing new markets, building key relationships and partnerships all across the value chain, and promoting and evangelizing for business opportunities. Peter is consistently recognized as a thought leader across multiple industries with a strong focus on innovation systems and strategic alliances over the past 10 years. Peter will be a valued member of the 4DS team and a critical decision maker in how the Company determines commercialisation strategies on the back of potential positive results in 2024 on both 60nm and 20nm memory cells.

### Placement and Issue of Securities

For the first half of the year, the Company issued 116,541,698 ordinary shares as a result of exercising unlisted options. Details regarding each class of options exercised are below:

- On 25 August 2023, the Company issued 43,852,572 fully paid ordinary shares following the exercising of \$0.055 unlisted options expiring on 31 March 2026 to raise \$2,411,891.
- On 30 August 2023, the Company issued 13,596,971 fully paid ordinary shares following the exercising of \$0.055 unlisted options expiring on 31 March 2026 to raise \$747,833; and  
1,500,000 fully paid ordinary shares following the exercising of \$0.08 unlisted options expiring on 3 December 2023 to raise \$120,000.
- On 4 September 2023, the Company issued 9,575,180 fully paid ordinary shares following the exercising of \$0.055 unlisted options expiring on 31 March 2026 to raise \$526,635; and  
7,450,000 fully paid ordinary shares following the exercising of \$0.052 unlisted options expiring on 22 January 2024 to raise \$387,400; and  
1,300,000 fully paid ordinary shares following the exercising of \$0.052 unlisted options expiring on 28 August 2024 to raise \$67,600.
- On 8 September 2023, the Company issued 2,000,000 fully paid ordinary shares following the exercising of \$0.055 unlisted options expiring on 31 March 2026 to raise \$110,000.
- On 11 September 2023, the Company issued 3,432,971 fully paid ordinary shares following the exercising of \$0.055 unlisted options expiring on 31 March 2026 to raise \$188,813.
- On 18 September 2023, the Company issued 3,606,582 fully paid ordinary shares following the exercising of \$0.055 unlisted options expiring on 31 March 2026 to raise \$198,362.
- On 19 September 2023, the Company issued 1,372,727 fully paid ordinary shares following the exercising of \$0.055 unlisted options expiring on 31 March 2026 to raise \$75,500.
- On 26 September 2023, the Company issued 1,803,029 fully paid ordinary shares following the exercising of \$0.055 unlisted options expiring on 31 March 2026 to raise \$99,166; and  
7,380,000 fully paid ordinary shares following the exercising of \$0.052 unlisted options expiring on 22 January 2024 to raise \$383,760; and  
4,000,000 fully paid ordinary shares following the exercising of \$0.037 unlisted options expiring on 19 December 2027 to raise \$148,000.
- On 4 October 2023, the Company issued 12,830,000 fully paid ordinary shares following the exercising of \$0.064 unlisted options expiring on 29 November 2025 to raise \$821,120.
- On 12 October 2023, the Company issued 400,000 fully paid ordinary shares following the exercising of \$0.08 unlisted options expiring on 3 December 2023 to raise \$32,000.
- On 25 October 2023, the Company issued 500,000 fully paid ordinary shares following the exercising of \$0.08 unlisted options expiring on 3 December 2023 to raise \$40,000.
- On 7 November 2023, the Company issued 500,000 fully paid ordinary shares following the exercising of \$0.08 unlisted options expiring on 3 December 2023 to raise \$40,000.
- On 15 November 2023, the Company issued 941,666 fully paid ordinary shares following the exercising of \$0.055 unlisted options expiring on 31 March 2026 to raise \$51,792.
- On 3 December 2023, 1,600,000 options excisable at \$0.08 expired.
- On 4 December 2023, the Company issued 500,000 fully paid ordinary shares following the exercising of \$0.08 unlisted options expiring on 3 December 2023 to raise \$40,000.

### Significant changes in the state of affairs

There were no significant changes in the state of affairs of the Group during the financial half-year.

### Matters subsequent to the end of the financial half-year

On 11 January 2024, the Company issued 9,450,000 fully paid ordinary shares following the exercising of \$0.052 unlisted options expiring on 22 January 2024 to raise \$491,400.

On 17 January 2024, the Company issued 300,000 fully paid ordinary shares following the exercising of \$0.052 unlisted options expiring on 22 January 2024 to raise \$15,600.

On 23 January 2024, 1,200,000 options exercisable at \$0.052 expired.

On 5 February 2024, the Company announced that it had successfully completed further analysis of the Fourth Platform Lot and the results obtained were significantly better as compared to results announcement on 18 September 2023. The focus of the additional testing was to investigate the speed and power efficiency of the 60nm memory cells in the megabit array. Analysis of the Fourth Platform Lot verified that 4DS has demonstrated:

- Reliable write speeds of 4.7 nanoseconds
- That memory cell programming is due to the phenomenon of Electric Pulse Induced Resistance switching (EPIR)
- Variable cell level writing by voltage or time pulse modification
- Persistent memory with low energy consumption

On 8 February 2024, the Company issued 4,000,000 fully paid ordinary shares following the exercising of \$0.037 unlisted options expiring on 19 December 2027 to raise \$148,000.

No other matter or circumstance has arisen since 31 December 2023 that has significantly affected, or may significantly affect the Group's operations, the results of those operations, or the Group's state of affairs in future financial years.

### Rounding of amounts

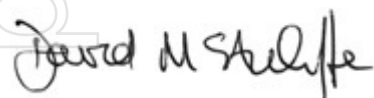
The Company is of a kind referred to in the Corporations Instrument 2016/191, issued by the Australian Securities and Investments Commission, in relation to 'rounding off'. Amounts in this report have been rounded off in accordance with that Corporations Instrument to the nearest dollar.

### Auditor's independence declaration

A copy of the auditor's independence declaration as required under section 307C of the Corporations Act 2001 is set out immediately after this Directors' report.

This report is made in accordance with a resolution of Directors, pursuant to section 306(3)(a) of the Corporations Act 2001.

On behalf of the directors



David McAuliffe  
Executive Chairman

21 February 2024



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AUDITOR'S INDEPENDENCE DECLARATION  
TO THE DIRECTORS OF 4DS MEMORY LIMITED

In relation to our review of the financial report of 4DS Memory Limited for the half-year ended 31 December 2023, to the best of my knowledge and belief, there have been no contraventions of the auditor independence requirements of the Corporations Act 2001 or any applicable code of professional conduct.

*PKF Perth*

PKF PERTH

*Simon Fermanis*

SIMON FERMANIS  
PARTNER

21 FEBRUARY 2024  
WEST PERTH,  
WESTERN AUSTRALIA



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## **General information**

The financial statements cover 4DS Memory Limited as a Group consisting of 4DS Memory Limited and the entities it controlled at the end of, or during, the half-year. The financial statements are presented in Australian dollars, which is 4DS Memory Limited's functional and presentation currency.

4DS Memory Limited is a listed public company limited by shares, incorporated and domiciled in Australia. Its registered office and principal place of business are:

### **Registered office**

Level 2, 50 Kings Park Road,  
West Perth WA 6005  
AUSTRALIA

### **Principal place of business**

3155 Skyway Court  
Fremont CA 94539  
USA

A description of the nature of the Group's operations and its principal activities are included in the Directors' report, which is not part of the financial statements.

The financial statements were authorised for issue, in accordance with a resolution of Directors, on 21 February 2024.

**4DS Memory Limited**  
**Consolidated statement of profit or loss and other comprehensive income**  
**For the half-year ended 31 December 2023**



	<b>31 December 2023</b>	<b>31 December 2022</b>
	<b>\$</b>	<b>\$</b>
<b>Revenue</b>		
Other income	7,323	-
Interest Income	165,007	14,223
<b>Expenses</b>		
Compliance and regulatory expense	(55,256)	(66,550)
Corporate and administration expense	(332,630)	(271,015)
Depreciation expense	(70,324)	(116,179)
Directors and employee expense	(156,915)	(180,639)
Research expenses	(969,262)	(1,611,762)
Share based payments	(268,343)	(506,858)
Other expenses	(96,457)	(98,561)
Unrealised / realised foreign exchange	(227)	(4,603)
<b>Operating loss</b>	<b>(1,777,084)</b>	<b>(2,841,944)</b>
Interest on lease liabilities	(3,294)	(6,789)
<b>Loss before income tax expense</b>	<b>(1,780,378)</b>	<b>(2,848,733)</b>
Income tax expense	-	-
<b>Loss after income tax expense for the half-year attributable to the owners of 4DS Memory Limited</b>	<b>(1,780,378)</b>	<b>(2,848,733)</b>
<b>Other comprehensive income</b>		
<i>Items that may be reclassified subsequently to profit or loss</i>		
Foreign currency translation	(18,299)	(12,427)
Other comprehensive income for the half-year, net of tax	(18,299)	(12,427)
<b>Total comprehensive income for the half-year attributable to the owners of 4DS Memory Limited</b>	<b>(1,798,677)</b>	<b>(2,861,160)</b>
	<b>Cents</b>	<b>Cents</b>
Basic earnings per share	(0.10)	(0.19)
Diluted earnings per share	(0.10)	(0.19)

*The above consolidated statement of profit or loss and other comprehensive income should be read in conjunction with the accompanying notes*

	Note	31 December 2023 \$	30 June 2023 \$
<b>Assets</b>			
<b>Current assets</b>			
Cash and cash equivalents		10,323,398	5,599,537
Trade and other receivables	3	120,584	-
Other assets		145,534	61,536
<b>Total current assets</b>		<u>10,589,516</u>	<u>5,661,073</u>
<b>Non-current assets</b>			
Property, plant and equipment		121,350	151,782
Right-of-use assets	4	302,184	39,894
<b>Total non-current assets</b>		<u>423,534</u>	<u>191,676</u>
<b>Total assets</b>		<u>11,013,050</u>	<u>5,852,749</u>
<b>Liabilities</b>			
<b>Current liabilities</b>			
Trade and other payables		59,279	81,809
Lease liabilities	5	112,716	53,964
Employee benefits		74,052	58,137
<b>Total current liabilities</b>		<u>246,047</u>	<u>193,910</u>
<b>Non-current liabilities</b>			
Lease liabilities	5	189,468	-
<b>Total non-current liabilities</b>		<u>189,468</u>	<u>-</u>
<b>Total liabilities</b>		<u>435,515</u>	<u>193,910</u>
<b>Net assets</b>		<u>10,577,535</u>	<u>5,658,839</u>
<b>Equity</b>			
Issued Capital	7	66,302,190	59,853,160
Reserves	8	6,040,440	5,790,396
Accumulated losses		(61,765,095)	(59,984,717)
<b>Total equity</b>		<u>10,577,535</u>	<u>5,658,839</u>

	Issued capital \$	Share-based payment reserves \$	Foreign exchange reserves \$	Accumulated losses \$	Total equity \$
Balance at 1 July 2022	54,840,272	5,605,124	6,143	(55,029,207)	5,422,332
Loss after income tax expense for the half-year	-	-	-	(2,848,733)	(2,848,733)
Other comprehensive income for the half-year, net of tax	-	-	(12,427)	-	(12,427)
Total comprehensive income for the half-year	-	-	(12,427)	(2,848,733)	(2,861,160)
<b>Transactions with owners in their capacity as owners:</b>					
Issue of share capital, net of transaction costs	(6,897)	-	-	-	(6,897)
Share-based payments (note 6)	-	506,858	-	-	506,858
Issue of shares on exercise of options	95,554	-	-	-	95,554
Options lapsed	-	(473,961)	-	17,711	(456,250)
Options cancelled	-	-	-	456,251	456,251
Balance at 31 December 2022	<u>54,928,929</u>	<u>5,638,021</u>	<u>(6,284)</u>	<u>(57,403,978)</u>	<u>3,156,688</u>
	Issued capital \$	Share-based payment reserves \$	Foreign exchange reserves \$	Accumulated losses \$	Total equity \$
Balance at 1 July 2023	59,853,160	5,820,926	(30,530)	(59,984,717)	5,658,839
Loss after income tax expense for the half-year	-	-	-	(1,780,378)	(1,780,378)
Other comprehensive income for the half-year, net of tax	-	-	(18,299)	-	(18,299)
Total comprehensive income for the half-year	-	-	(18,299)	(1,780,378)	(1,798,677)
<b>Transactions with owners in their capacity as owners:</b>					
Contributions of equity, net of transaction costs (note 7)	(40,843)	-	-	-	(40,843)
Share-based payments (note 6)	-	268,343	-	-	268,343
Issue of shares on exercise of options (note 7)	6,489,873	-	-	-	6,489,873
Balance at 31 December 2023	<u>66,302,190</u>	<u>6,089,269</u>	<u>(48,829)</u>	<u>(61,765,095)</u>	<u>10,577,535</u>

**4DS Memory Limited**  
**Consolidated statement of cash flows**  
**For the half-year ended 31 December 2023**



	<b>31 December 2023</b>	<b>31 December 2022</b>
	\$	\$
<b>Cash flows from operating activities</b>		
Payments to suppliers and employees	(627,798)	(644,201)
Payments for research expense	(982,409)	(1,166,248)
Payments for business development	(117,373)	(78,748)
	<u>(1,727,580)</u>	<u>(1,889,197)</u>
Interest received	64,097	14,223
Interest paid	(3,292)	(6,789)
	<u>(1,666,775)</u>	<u>(1,881,763)</u>
<b>Net cash used in operating activities</b>		
	<u>(1,666,775)</u>	<u>(1,881,763)</u>
<b>Net cash from investing activities</b>	-	-
<b>Cash flows from financing activities</b>		
Proceeds from exercise of options	6,489,873	95,554
Payment of options issued	(40,846)	(16,703)
Principal elements of lease payments	(58,166)	(66,324)
	<u>6,390,861</u>	<u>12,527</u>
<b>Net cash from financing activities</b>		
	<u>6,390,861</u>	<u>12,527</u>
Net increase/(decrease) in cash and cash equivalents	4,724,086	(1,869,236)
Cash and cash equivalents at the beginning of the financial half-year	5,599,537	5,234,447
Effects of exchange rate changes on cash and cash equivalents	(225)	(5,754)
	<u>(225)</u>	<u>(5,754)</u>
<b>Cash and cash equivalents at the end of the financial half-year</b>	<u><u>10,323,398</u></u>	<u><u>3,359,457</u></u>

*The above consolidated statement of cash flows should be read in conjunction with the accompanying notes*

## Note 1. Material accounting policy information

### *Basis of preparation*

These general purpose financial statements for the interim half-year reporting period ended 31 December 2023 have been prepared in accordance with Australian Accounting Standard AASB 134 'Interim Financial Reporting' and the Corporations Act 2001, as appropriate for for-profit oriented entities. Compliance with AASB 134 ensures compliance with International Financial Reporting Standard IAS 34 'Interim Financial Reporting'.

These general purpose financial statements do not include all the notes of the type normally included in annual financial statements. Accordingly, these financial statements are to be read in conjunction with the annual report for the year ended 30 June 2023 and any public announcements made by the Company during the interim reporting period in accordance with the continuous disclosure requirements of the Corporations Act 2001.

The accounting policies adopted are consistent with those of the previous financial year and corresponding interim reporting period, unless otherwise stated.

### *Going Concern*

The consolidated financial statements have been prepared on going concern basis. In arriving at this position, the directors have had regard to the fact that the Company has, or in the directors' opinion will have access to, sufficient cash to fund administrative and other committed expenditure for a period of not less than 12 months from the date of this report.

As at 31 December 2023, the net assets of the Group totalled \$10,577,535 (30 June 2023: \$5,658,839) and cash on hand totalled \$10,323,398 (30 June 2023: \$5,599,537).

### *New or amended Accounting Standards and Interpretations adopted*

The Group has considered the implications of new or amended Accounting Standards which have become applicable for the current annual financial reporting half-year beginning on or after 1 July 2023. It has been determined by the Group that there is no impact, material or otherwise, of the new or amended Accounting Standards and therefore no changes to Group accounting policies. No retrospective change in accounting policy of material reclassification has occurred during the half-year.

Any new or amended Accounting Standards or Interpretations that are not yet mandatory have not been early adopted.

The accounting policies adopted are consistent with those of the previous financial year and corresponding interim reporting period, unless otherwise stated.

## Note 2. Operating segments

Operating segments are identified, and segment information disclosed on the basis of internal reports that are regularly provided to, or reviewed by, the Group's chief operating decision maker which, for the Group, is the Board of Directors. In this regard, such information is provided using similar measures to those used in preparing the statement of profit or loss and other comprehensive income and statement of financial position.

The Company has identified its operating segments based on internal reports reviewed by the Board and management. There was only one operating segment being research and development of Interface Switching ReRAM technology for next generation storage in mobile and cloud.

**Note 3. Trade and other receivables**

	31 December 2023 \$	30 June 2023 \$
<i>Current assets</i>		
Other receivables	19,674	-
Interest receivable	100,910	-
	<u>120,584</u>	<u>-</u>

**Note 4. Right-of-use assets**

	31 December 2023 \$	30 June 2023 \$
<i>Non-current assets</i>		
Land and buildings - right-of-use	302,184	39,894
	<u>302,184</u>	<u>39,894</u>

Additions to the right-of-use assets during the half-year were \$302,184.

On 16 November 2023, the Group signed a lease-to-lease building for its office and principal place of business in United States under agreement between 1 December 2023 to 31 May 2026. The rent for December 2023 was abated.

**Note 5. Lease liabilities**

	31 December 2023 \$	30 June 2023 \$
<i>Current liabilities</i>		
Lease liability	112,716	53,964
<i>Non-current liabilities</i>		
Lease liability	189,468	-
	<u>302,184</u>	<u>53,964</u>

**Maturity analysis - contractual undiscounted cash flows**

Less than one year	(106,611)	(57,202)
One to five years	(203,065)	-
Total undiscounted lease payables	<u>(309,676)</u>	<u>(57,202)</u>

	31 December 2023	31 December 2022
<i>i. AASB 16 related amount recognised in the statement of profit or loss</i>		
Interest on lease liabilities	(3,294)	(6,789)
Depreciation charged related to right-of-use assets	(39,893)	(55,061)
	<u>(43,187)</u>	<u>(61,850)</u>

**ii. AASB related amount recognised in the statement of cash flow**

Total half-yearly cash flows for leases	(58,166)	(66,324)
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## Note 6. Share-based payments

Set out below are summaries of options granted under the plan:

	Number of options	
	31 December 2023	31 December 2022
Outstanding at the beginning of the financial half-year	170,298,882	99,185,000
Granted	-	21,500,000
Forfeited	-	(35,000,000)
Exercised	(116,541,698)	(2,275,000)
Expired	(1,600,000)	(500,000)
Outstanding at the end of the financial half-year	<u>52,157,184</u>	<u>82,910,000</u>

For the period ended 31 December 2023 a share-based payment of \$268,343 (31 December 2022: \$506,858) was recognised as an expense in the profit or loss statement, the whole amount was related to vesting expense from options issued in a prior period.

## Note 7. Issued Capital

	31 December 2023 Shares	30 June 2023 Shares	31 December 2023 \$	30 June 2023 \$
Issued capital	1,749,084,918	1,632,543,220	69,778,803	63,288,930
Capital raising costs	-	-	(3,476,613)	(3,435,770)
	<u>1,749,084,918</u>	<u>1,632,543,220</u>	<u>66,302,190</u>	<u>59,853,160</u>

### Movements in ordinary share capital

Details	Date	Shares	Issue price	\$
Balance	1 July 2022	1,477,490,442		54,826,216
Placement Shares	20 March 2023	152,777,778	\$0.036	5,500,000
Exercise of unlisted options	8 July 2022	2,275,000	\$0.042	95,554
Capital raising cost	30 June 2023			(568,610)
<b>Balance</b>	<b>30 June 2023</b>	<u><b>1,632,543,220</b></u>		<u><b>59,853,160</b></u>



**Note 7. Issued Capital (continued)**

Details	Date	Shares	Issue price	\$
Balance	1 July 2023	1,632,543,220		59,853,160
Exercise of unlisted options	25 August 2023	43,852,572	\$0.055	2,411,891
Exercise of unlisted options	30 August 2023	13,596,971	\$0.055	747,833
Exercise of unlisted options	30 August 2023	1,500,000	\$0.080	120,000
Exercise of unlisted options	4 September 2023	9,575,180	\$0.055	526,635
Exercise of unlisted options	4 September 2023	8,750,000	\$0.052	455,000
Exercise of unlisted options	8 September 2023	2,000,000	\$0.055	110,000
Exercise of unlisted options	11 September 2023	3,432,971	\$0.055	188,813
Exercise of unlisted options	18 September 2023	3,606,582	\$0.055	198,362
Exercise of unlisted options	19 September 2023	1,372,727	\$0.055	75,500
Exercise of unlisted options	26 September 2023	1,803,029	\$0.055	99,167
Exercise of unlisted options	26 September 2023	7,380,000	\$0.052	383,760
Exercise of unlisted options	26 September 2023	4,000,000	\$0.037	148,000
Exercise of unlisted options	4 October 2023	12,830,000	\$0.064	821,120
Exercise of unlisted options	12 October 2023	400,000	\$0.080	32,000
Exercise of unlisted options	25 October 2023	500,000	\$0.080	40,000
Exercise of unlisted options	7 November 2023	500,000	\$0.080	40,000
Exercise of unlisted options	15 November 2023	941,666	\$0.055	51,792
Exercise of unlisted options	4 December 2023	500,000	\$0.080	40,000
Transaction cost		-	\$0.000	(40,843)
<b>Balance</b>	<b>31 December 2023</b>	<b>1,749,084,918</b>		<b>66,302,190</b>

*Movements in options*

Details	Date	Options	\$
Balance	1 July 2022	99,185,000	5,605,124
Options exercised, employee options		(2,275,000)	-
Options expired/forfeited		(41,500,000)	(838,730)
Options issued		76,388,882	-
Amortisation of previously issued new options		-	508,993
Share based payment, employee options		27,500,000	328,038
Share based payment, consultant options		1,000,000	12,003
Share based payment, broker options		10,000,000	205,498

**Balance** **30 June 2023** **170,298,882** **5,820,926**

Details	Date	Options	\$
Balance	1 July 2023	170,298,882	5,820,926
Options exercised, employee options		(20,130,000)	-
Options exercised, ex-director options		(12,830,000)	-
Options exercised, consultant options		(83,581,698)	-
Options expired		(1,600,000)	-
Amortisation of previously issued employee options		-	268,343

**Balance** **31 December 2023** **52,157,184** **6,089,269**

**Note 8. Reserves**

	31 December 2023 \$	30 June 2023 \$
Foreign currency reserve	(48,829)	(30,530)
Share-based payments reserve	6,089,269	5,820,926
	<b>6,040,440</b>	<b>5,790,396</b>

*Movements in reserves*

Movements in each class of reserve during the current and previous financial half-year are set out below:

	Share based payment reserve \$	Foreign exchange translation reserve \$	Total \$
<b>Balance at 1 July 2022</b>	<b>5,605,124</b>	<b>6,143</b>	<b>5,611,267</b>
Foreign currency translation	-	(36,673)	(36,673)
Share based payment - employee options	1,054,532	-	1,054,532
Options lapsed/cancelled	(838,730)	-	(838,730)
<b>Balance at 30 June 2023</b>	<b>5,820,926</b>	<b>(30,530)</b>	<b>5,790,396</b>
Foreign currency translation	-	(18,299)	(18,299)
Share based payment - employee options	268,343	-	268,343
<b>Balance at 31 December 2023</b>	<b>6,089,269</b>	<b>(48,829)</b>	<b>6,040,440</b>

**Note 9. Commitments and Contingent**

*Sales Bonus Pool Commitment*

On 6 October 2020, the Board approved a resolution to introduce a Sales Bonus Pool, which entitles participants in the Sales Bonus Pool to a cash payment upon liquidity event (such as takeover, or sale of the Company's intellectual property) provided that the participants have continually provided services through to the time of the liquidity event and the size of the Sales bonus Pool shall be calculated as follow:

**Sales Bonus Pool**

Sales Value up to US\$120m	Nil
Sales value between US\$120m to US\$350m	5% of the sales value
Sales value between US\$350m to US\$550m	US\$17.5m plus 6.25% of the excess above US\$350m
Sales value above US\$550m	\$30m plus 7.5% of the excess above US\$550m

As at 31 December 2023, the following structure supersedes all previous participation in the Sales Bonus Pool and the Directors participation has approved by the shareholders in the AGM hold on 30 November 2023.

Participants	New %	Previous %
David McAuliffe	17.5%	-
Howard Digby	7.5%	-
Guido Arnout	15.0%	15.0%
Ting Yen	25.0%	10.0%
Joseph Tzou	15.0%	4.0%
Michael Hawran	5.0%	2.0%
Peter Webse	5.0%	-

## Note 9. Commitments and Contingent (continued)

### *Imec Commitment*

On 29 November 2023, the Company announced the collaboration extension with imec from 1 January 2024 to 31 December 2024 to manufacture the fifth and sixth platform lots. The consideration for all collaboration activities is Euro 1,920,000 which is to be made within the next 12 months.

There have been no other significant changes in commitments and contingent since the last reporting date.

## Note 10. Events after the reporting period

On 11 January 2024, the Company issued 9,450,000 fully paid ordinary shares following the exercising of \$0.052 unlisted options expiring on 22 January 2024 to raise \$491,400.

On 17 January 2024, the Company issued 300,000 fully paid ordinary shares following the exercising of \$0.052 unlisted options expiring on 22 January 2024 to raise \$15,600.

On 23 January 2024, 1,200,000 options exercisable at \$0.052 expired.

On 5 February 2024, the Company announced that it had successfully completed further analysis of the Fourth Platform Lot and the results obtained were significantly better as compared to results announcement on 18 September 2023. The focus of the additional testing was to investigate the speed and power efficiency of the 60nm memory cells in the megabit array. Analysis of the Fourth Platform Lot verified that 4DS has demonstrated:

- Reliable write speeds of 4.7 nanoseconds
- That memory cell programming is due to the phenomenon of Electric Pulse Induced Resistance switching (EPIR)
- Variable cell level writing by voltage or time pulse modification
- Persistent memory with low energy consumption

On 8 February 2024, the Company issued 4,000,000 fully paid ordinary shares following the exercising of \$0.037 unlisted options expiring on 19 December 2027 to raise \$148,000.

No other matter or circumstance has arisen since 31 December 2023 that has significantly affected, or may significantly affect the Group's operations, the results of those operations, or the Group's state of affairs in future financial years.

In the Directors' opinion:

- the attached financial statements and notes comply with the Corporations Act 2001, Australian Accounting Standard AASB 134 'Interim Financial Reporting', the Corporations Regulations 2001 and other mandatory professional reporting requirements;
- the attached financial statements and notes give a true and fair view of the Group's financial position as at 31 December 2023 and of its performance for the financial half-year ended on that date; and
- there are reasonable grounds to believe that the Company will be able to pay its debts as and when they become due and payable.

Signed in accordance with a resolution of Directors made pursuant to section 303(5)(a) of the Corporations Act 2001.

On behalf of the Directors



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David McAuliffe  
Executive Chairman

21 February 2024

For personal



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INDEPENDENT AUDITOR'S REVIEW REPORT  
TO THE MEMBERS OF 4DS MEMORY LIMITED  
Report on the Half-Year Financial Report

### Conclusion

We have reviewed the half-year financial report of 4DS Memory Limited (the company) and controlled entities (consolidated entity) which comprises the consolidated statement of financial position as at 31 December 2023, the consolidated statement of profit or loss and other comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the half-year ended on that date, and notes to the financial statements, including material accounting policy information and the directors' declaration of the consolidated entity comprising the company and the entities it controlled at 31 December 2023, or during the half year.

Based on our review, which is not an audit, we have not become aware of any matter that makes us believe that the accompanying half-year financial report of 4DS Memory Limited is not in accordance with the Corporations Act 2001 including:

- (a) giving a true and fair view of the consolidated entity's financial position as at 31 December 2023 and of its performance for the half-year ended on that date; and
- (b) complying with Accounting Standard AASB 134 Interim Financial Reporting and the Corporations Regulations 2001.

### Basis for Conclusion

We conducted our review in accordance with ASRE 2410 Review of a Financial Report Performed by the Independent Auditor of the Entity. Our responsibilities are further described in the Auditor's Responsibilities for the Review of the Financial Report section of our report.

### Independence

We are independent of the company in accordance with the auditor independence requirements of the Corporations Act 2001 and the ethical requirements of the Accounting Professional and Ethical Standards Board's APES 110 Code of Ethics for Professional Accountants (including Independence Standards) (the Code) that are relevant to our audit of the annual financial report in Australia. We have also fulfilled our other ethical responsibilities in accordance with the Code.

### Directors' Responsibility for the Half-Year Financial Report

The directors of the company are responsible for the preparation of the half-year financial report that gives a true and fair view in accordance with the Australian Accounting Standards and the Corporations Act 2001 and for such internal controls as the directors determine is necessary to enable the preparation of the half-year financial report that gives a true and fair view and is free from material misstatement, whether due to fraud or error.

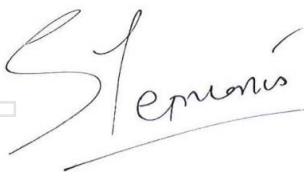
### Auditor's Responsibilities for the Review of the Financial Report

Our responsibility is to express a conclusion on the half-year financial report based on our review. ASRE 2410 requires us to conclude whether we have become aware of any matter that makes us believe that the half-year financial report is not in accordance with the Corporations Act 2001 including: giving a true and fair view of the consolidated entity's financial position as at 31 December 2023 and its performance for the half year ended on that date; and complying with Accounting Standard AASB 134 Interim Financial Reporting and the Corporation Regulations 2001.

A review of a half-year financial report consists of making enquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with Australian Auditing Standards and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.



PKF PERTH



SIMON FERMANIS  
PARTNER

21 FEBRUARY 2024  
WEST PERTH,  
WESTERN AUSTRALIA