CONSISTENT ACHIEVEMENT OF STRATEGIC AND TECHNICAL MILESTONES


During the period, 4DS made significant progress in the development of its non-filamentary resistive random access memory (ReRAM) technology with the consistent achievement of key strategic and technical milestones.

Operational Highlights
- Renewed joint development agreement with Western Digital Corporation subsidiary HGST for 12 months
- Produced viable 50nm ReRAM cells, in line with 3D Flash production geometries
- Accelerated the endurance testing process with a new customised test station, operational since mid-June
- Continued improvements to the core intellectual property on time and within budget
- Received a 16th US patent providing further protection of 4DS non-filamentary ReRAM to 2029
- Raised A$2.75 million through a Public Offering and listed on the ASX on 17 December 2015

At the end of the financial period, HGST, a subsidiary of Western Digital Corporation, the leader in digital storage, renewed a 12-month joint development agreement (JDA) with 4DS.

The 4DS Board considers this renewal an important milestone in developing 4DS’ next generation memory solutions.

The collaboration with HGST, which commenced in July 2014, accelerates the evolution of non-filamentary ReRAM with the goal of optimising the 4DS technology for the mobile and cloud gigabyte (GB) silicon storage market.

The engagement enables 4DS to demonstrate the necessary data to prove the value of its IP and the viability of the technology for GB silicon storage without incurring the expense of fabricating fully functional GB ReRAM prototypes.

In February 2016, during the second year of the JDA, 4DS achieved a ground breaking milestone demonstrating a scalable non-filamentary ReRAM cell at a 50 nm lithography, and in line with 3D Flash production geometries.

A new test station, which provides 4DS with the ability to test cycling endurance 10 times faster than with off-the-shelf test equipment, has been operational since mid-June.

This customised in-house test station significantly expedites the testing process for the potential to complete the performance milestone which relates to cycling endurance. In parallel, the existing test station will continue to be used for functional analysis and testing of data retention.

During the period, 4DS made continued improvements, on schedule and within budget, to the core intellectual property of its memory cell technology.

The Company’s intellectual property portfolio was strengthened by the addition of the 16th US patent, specifically relating to a heterojunction resistive memory device in conjunction with a thin-film access device.

The patent portfolio is based on wholly-owned, in-house developed, intellectual property created during the past ten years and contains both ReRAM cell patents and PCMO deposition patents. An additional seven patent applications are in various stages of review at the United States Patent and Trademark Office.
This most recent patent granted is essential for the commercialisation of 3D stacked ReRAMs and offers patent protection to 2029.

In December 2015, 4DS raised A$2.75 million through a successful oversubscribed Public Offering, demonstrating investor appetite for the patented and unique technology being pioneered by the Company.

Chief Executive Officer and Managing Director, Dr Guido Arnout said “4DS is addressing the fastest growing segment of the global memory market. In 2020, emerging non-volatile memory is predicted to be a US$7 billion market.

“With breakthrough technology for next generation GB silicon storage, combined with the expectation of achieving future development goals and underpinned by a strategic partnership with a global leader in digital storage, 4DS is well positioned to meet the needs of a growing multi-billion-dollar market.”

Upcoming Development Milestones

The next near term goals are to:
1. Report how far below 50nm 4DS has been able to scale its ReRAM cell; and

4DS will continue to provide investors with updates as development progress advances toward reliably and consistently fabricated smaller cell geometries and the collection of statistically significant endurance yield data.

Operating Results

For the year ended 30 June 2016, the loss of the Company after providing for income tax amounted to A$11,741,689 (2015: A$1,304,852 loss).

At 30 June 2016, the cash balance was A$1,243,487.

Full details of the consolidated financial statements are included in the Annual Financial Report lodged today.

ENDS

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About 4DS

4DS Memory Limited (ASX: 4DS), with research and development facilities located in Silicon Valley, is a developer of non-volatile memory technology, pioneering non-filamentary ReRAM for next generation storage in mobile and cloud. Established in 2007, 4DS owns a patented IP portfolio developed in-house to create high density gigabyte storage. 4DS has a joint development agreement with Western Digital subsidiary HGST, a global storage leader. For more information, please visit www.4dsmemory.com.
Disclaimer

This release contains certain forward looking statements that are based on the Company’s management’s beliefs, assumptions and expectations and on information currently available to management. Such forward looking statements involve known and unknown risks, uncertainties, and other factors which may cause the actual results or performance of 4DS to be materially different from the results or performance expressed or implied by such forward looking statements. Such forward looking statements are based on numerous assumptions regarding the Company’s present and future business strategies and the political and economic environment in which 4DS will operate in the future, which are subject to change without notice. Past performance is not necessarily a guide to future performance and no representation or warranty is made as to the likelihood of achievement or reasonableness of any forward looking statements or other forecast. To the full extent permitted by law, 4DS and its directors, officers, employees, advisers, agents and intermediaries disclaim any obligation or undertaking to release any updates or revisions to information to reflect any change in any of the information contained in this release (including, but not limited to, any assumptions or expectations set out in the release).

You should not place undue reliance on these forward- looking statements. Except as required by law or regulation (including the ASX Listing Rules) we undertake no obligation to update these forward- looking statements.