

## Q2 FY2019 Activities Update

*Additional funding positions the company to accelerate to the next stage of productisation; developing broad partnerships*

### Key highlights for Q2

- **Successfully closed Share Purchase Plan which was significantly oversubscribed**
- **Demonstrated commercially viable data retention results at 40nm**
- **Amended license agreement with Rice University**
- **Extended partnership agreement with Leti in preparation for commercialisation**
- **Appointed a VP, Strategic Alliances in China given the rapid growth in the Chinese semiconductor industry**
- **Several very productive discussions with industry participants and research institutes that have resulted in partnerships announced in Q3**

25 January, 2019 – Weebit Nano Ltd (ASX: WBT) is pleased to provide an update for the quarter ending 31 December 2018, along with its Appendix 4C cash flow results.

### Share Purchase Plan closed oversubscribed

In late September, Weebit Nano announced plans to conduct a non-underwritten Share Purchase Plan (SPP) to raise a further \$1 million during October. The SPP received very strong shareholder support, closing oversubscribed and raising more than \$1.5 million in valid applications.

The board decided to accept all oversubscriptions from the SPP to ensure that the company is funded as it progresses its ReRAM technology to the next stage of productisation, including scaling down to 28nm, further progressing talks with potential partners, and initiating work with production fabs.

### Over 10 years' data retention achieved across 40nm array

During the quarter, Weebit Nano released successful data retention results on its scaled down 40nm array. The results are extremely important in ensuring that Weebit Nano's technology is capable of maintaining stored information for more than 10 years, which is above the requirement to be commercially viable.

Data retention is considered one of the most crucial reliability parameters in the non-volatile memory market as retention errors are the most dominant failure mechanism, responsible for more than 99 per cent of the NAND (or flash memory) failures after one year in the field<sup>1</sup>.

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<sup>1</sup> Cai, Yu; Error Patterns in MLC NAND Flash Memory; EDAA 2012



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The data retention test was conducted in CEA/Leti testing facilities by Weebit Nano engineers under various testing conditions, including elevated temperatures for various periods of time to accelerate ageing of the devices in order to replicate 10 years' operation in the field. Results showed that Weebit's ReRAM SiO<sub>x</sub> arrays did not present any significant degradation with information being detected with no corruption after 10 years' field operation.

In addition, Weebit's 40nm devices endured an elevated temperature of 260°C for a period of time that well exceeds the requirements of soldering semiconductor components onto a printed circuit board (PCB).

**Amended license agreement with Rice University and extended partnership with Leti**

Weebit Nano amended its license agreement with William Marsh Rice University (Rice University) to reflect the company's progress towards commercialisation. The agreement was refined to more closely align payments and milestones with Weebit Nano's commercialisation timetable, and also reflects the company's focus on the embedded memory market, rather than the single chip memory market.

During the reporting period, Weebit also extended its agreement with its partner Leti, the French research institute recognised as a global leader in the field of micro-electronics, to further develop and optimise the company's ReRAM technology.

The agreement extension includes adapting the production process of Weebit's ReRAM technology to 300mm wafers, which are the common wafers used in production fabs, using the 28nm technology as the vehicle.

**Jackson Lam appointed VP Strategic Alliances, China**

In the December quarter, Weebit appointed Jackson Lam as Vice President Strategic Alliances, China, in an advisory capacity. In the role, Mr Lam is responsible for Weebit's partnerships in China, including customers, potential industry partners, and investors. Mr Lam has almost 40 years' experience in the Chinese semiconductor industry. He spent 15 years with Panasonic in business development, and established an R&D and manufacturing company providing services for many well-known international semiconductor companies.

The Chinese semiconductor industry is growing rapidly – faster than the rest of the world. Revenues are expected to reach almost US\$129 billion by 2020 – nearly a third of global revenue.

**Partnered with Indian Institute of Technology Delhi on joint Neuromorphic ReRAM project**

In November, Weebit partnered with the Non-Volatile Memory Research Group of the Indian Institute of Technology Delhi (IITD) to research the use of Weebit's SiO<sub>x</sub> ReRAM technology for certain types of neuromorphic applications used for artificial intelligence.

The Non-Volatile Memory Research Group of IITD is a globally recognised research facility, specialising in different applications of advanced Non-Volatile technologies. The group is led by

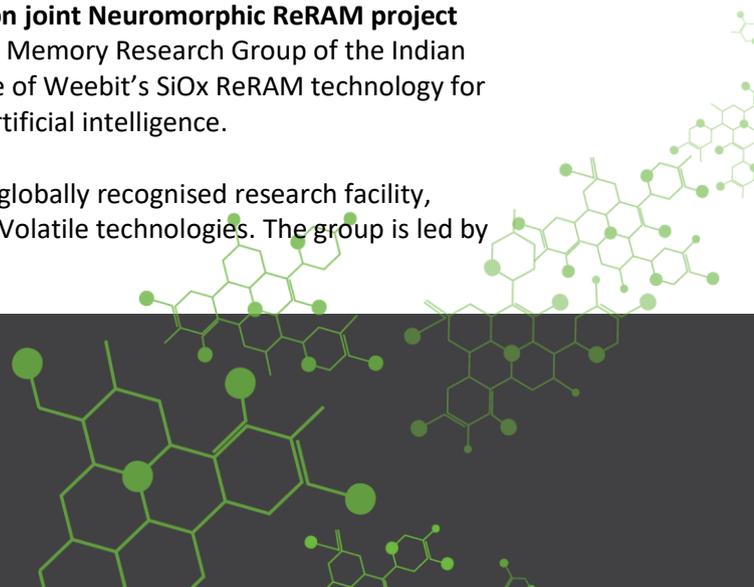


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Professor Manan Suri, a well-known researcher in the domain of artificial intelligence and the recipient of several prestigious international honours for his work in the non-volatile memory field.

Artificial Neural Network (ANN) and Deep Neural Network (DNN) technologies are expected to be significant drivers for artificial intelligence, given the way they mimic how the human brain learns and processes information. ReRAM devices are promising candidates for enabling high-density and scaled synaptic arrays in neuromorphic architectures as they are significantly smaller and more energy efficient than current AI data centres.

### Looking ahead

Following the oversubscribed SPP, Weebit Nano is now well-funded to progress to the next stage of productisation, and moves closer to the transfer of its technology to a production fab. In collaboration with Leti, Weebit Nano has already begun preparing its technology for the move to 300mm wafers at 28nm with early tests yielding promising results.

In the third quarter, Weebit announced a partnership with Silvaco, a leading global Electronic Design Automation company, as well as with research institute Politecnico di Milano. A number of other discussions have been taking place with other industry participants that will continue to be pursued over the coming quarter.

The Company remains on track to complete its major process optimisation phase by the end of the third quarter (first quarter of the 2019 calendar year).

For further information, contact:

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### About Weebit Nano Limited

Weebit Nano is a leader in the development of next generation computer memory technology, and plans to become the new industry standard in this space. Its goal is to address the growing need for a significantly higher performance and lower power computer memory technology. Weebit Nano's ReRAM technology is based on fab-friendly Silicon Oxide, allowing the company to rapidly execute, without the need for special equipment or preparations. The company secured several patents to ensure optimal commercial and legal protection for its ground-breaking technology.

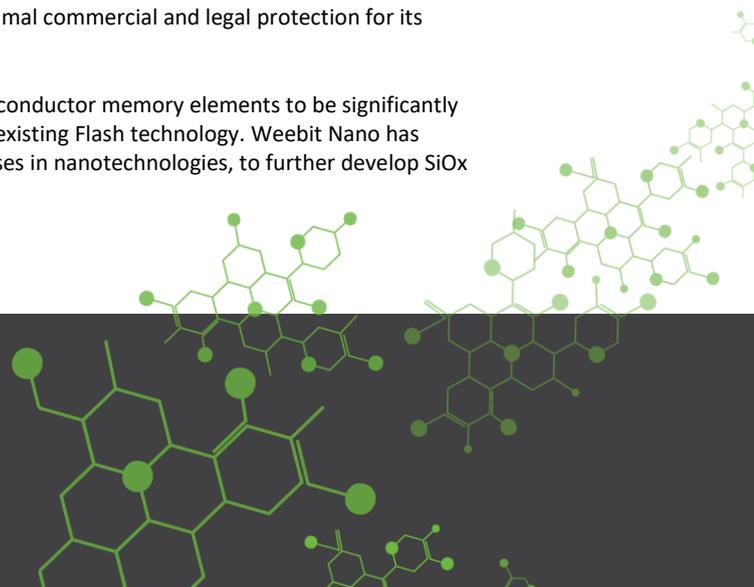
Weebit Nano's technology enables a quantum leap, allowing semiconductor memory elements to be significantly cheaper, faster, more reliable and more energy efficient than the existing Flash technology. Weebit Nano has signed an R&D agreement with Leti, an R&D institute that specialises in nanotechnologies, to further develop SiOx ReRAM technology.

For more information please visit: <http://www.weebit-nano.com/>



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## Appendix 4C

### Quarterly report for entities subject to Listing Rule 4.7B

Introduced 31/03/00 Amended 30/09/01, 24/10/05, 17/12/10, 01/09/16

**Name of entity**

Weebit Nano Limited (ASX:WBT)

**ABN**

15 146 455 576

**Quarter ended ("current quarter")**

31 December 2018

<b>Consolidated statement of cash flows</b>	<b>Current quarter \$A'000</b>	<b>Year to date ( 3 months) \$A'000</b>
<b>1. Cash flows from operating activities</b>		
1.1 Receipts from customers	-	-
1.2 Payments for		
(a) research and development	(2,353)	(2,414)
(b) product manufacturing and operating costs	-	-
(c) advertising and marketing	(33)	(81)
(d) leased assets	(31)	(84)
(e) staff costs	(273)	(504)
(f) administration and corporate costs	(436)	(1,128)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	4	6
1.5 Interest and other costs of finance paid	(1)	(2)
1.6 Income taxes paid	-	-
1.7 Government grants and tax incentives	-	-
1.8 Other: Former activities (Exploration)	-	-
<b>1.9 Net cash from / (used in) operating activities</b>	<b>(3,123)</b>	<b>(4,207)</b>

<b>2.</b>	<b>Cash flows from investing activities</b>		
2.1	Payments to acquire:		
	(a) property, plant and equipment	-	-
	(b) businesses (see item 10)	-	-
	(c) investments	-	-
	(d) intellectual property	-	-
	(e) other non-current assets	-	-
2.2	Proceeds from disposal of:		
	(a) property, plant and equipment		-
	(b) businesses (see item 10)	-	-
	(c) investments	-	-
	(d) intellectual property	-	-
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
<b>2.6</b>	<b>Net cash from / (used in) investing activities</b>	<b>-</b>	<b>-</b>

<b>3.</b>	<b>Cash flows from financing activities</b>		
3.1	Proceeds from issues of shares	3,853	4,374
3.2	Proceeds from issue of convertible notes	-	-
3.3	Proceeds from exercise of share options	-	-
3.4	Transaction costs related to issues of shares, convertible notes or options	(272)	(347)
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
<b>3.10</b>	<b>Net cash from / (used in) financing activities</b>	<b>3,581</b>	<b>4,027</b>

<b>4.</b>	<b>Net increase / (decrease) in cash and cash equivalents for the period</b>		
4.1	Cash and cash equivalents at beginning of quarter/year to date	2,818	3,357
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(3,123)	(4,207)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	3,581	4,027
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	-
4.5	Effect of movement in exchange rates on cash held	100	199
<b>4.6</b>	<b>Cash and cash equivalents at end of quarter</b>	<b>3,376</b>	<b>3,376</b>

<b>5.</b>	<b>Reconciliation of cash and cash equivalents</b> at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	<b>Current quarter \$A'000</b>	<b>Previous quarter \$A'000</b>
5.1	Bank balances	3,376	2,818
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
<b>5.5</b>	<b>Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>3,376</b>	<b>3,376</b>

<b>6.</b>	<b>Payments to directors of the entity and their associates</b>	<b>Current quarter \$A'000</b>
6.1	Aggregate amount of payments to these parties included in item 1.2	284
6.2	Aggregate amount of cash flow from loans to these parties included in item 2.3	
6.3	Include below any explanation necessary to understand the transactions included in items 6.1 and 6.2	

<b>7. Payments to related entities of the entity and their associates</b>	<b>Current quarter \$A'000</b>
7.1 Aggregate amount of payments to these parties included in item 1.2	-
7.2 Aggregate amount of cash flow from loans to these parties included in item 2.3	-
7.3 Include below any explanation necessary to understand the transactions included in items 7.1 and 7.2	

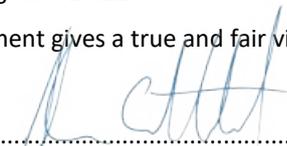
<b>8. Financing facilities available</b> <i>Add notes as necessary for an understanding of the position</i>	<b>Total facility amount at quarter end \$A'000</b>	<b>Amount drawn at quarter end \$A'000</b>
8.1 Loan facilities	-	-
8.2 Credit standby arrangements	-	-
8.3 Other (please specify)	-	-
8.4 Include below a description of each facility above, including the lender, interest rate and whether it is secured or unsecured. If any additional facilities have been entered into or are proposed to be entered into after quarter end, include details of those facilities as well.		

<b>9. Estimated cash outflows for next quarter</b>	<b>\$A'000</b>
9.1 Research and development	518
9.2 Product manufacturing and operating costs	-
9.3 Advertising and marketing	103
9.4 Leased assets	31
9.5 Staff costs	217
9.6 Administration and corporate costs	400
9.7 Other	-
<b>9.8 Total estimated cash outflows</b>	<b>1,269</b>

<b>10. Acquisitions and disposals of business entities (items 2.1(b) and 2.2(b) above)</b>	<b>Acquisitions</b>	<b>Disposals</b>
10.1 Name of entity	-	-
10.2 Place of incorporation or registration	-	-
10.3 Consideration for acquisition or disposal	-	-
10.4 Total net assets	-	-
10.5 Nature of business	-	-

**Compliance statement**

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Sign here: .....  
(Director/Company secretary)

Date: 25 January 2019.....

Print name: Adam Sutherland.....

**Notes**

1. The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity that wishes to disclose additional information is encouraged to do so, in a note or notes included in or attached to this report.
2. If this quarterly report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standard applies to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.