

**MICROMEM TECHNOLOGIES INC.  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
FOR THE 3 MONTHS ENDED JANUARY 31, 2012  
PREPARED AS OF APRIL 30, 2012**

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## **INTRODUCTION**

The following sets out the Management's Discussion and Analysis ("MD&A") of the financial position and result of operations for the 3 months ended January 31, 2012 of Micromem Technologies Inc. (the "Company", "Micromem" or "we"). The MD&A should be read in conjunction with the Company's audited consolidated financial statements and accompanying notes for the 3 months ended January 31, 2012 which are prepared in accordance with International Financial Reporting Standards (IFRS). All financial analysis, data and information set out in this MD&A are unaudited. Additional information regarding the Company is available on the SEDAR website at [www.sedar.com](http://www.sedar.com).

Certain information provided by the Company in this MD&A and in other documents publicly filed throughout the year that are not recitation of historical facts may constitute forward-looking statements. The words "may", "would", "could", "will", "likely", "estimate", "believe", "expect", "forecast" and similar expressions are intended to identify forward-looking statements.

Readers are cautioned that such statements are only predictions and the actual events or results may differ materially. In evaluating such forward-looking statements, readers should specifically consider the various factors that could cause actual events or results to differ materially from those indicated by such forward-looking statements.

## **FORWARD LOOKING STATEMENTS**

This MD&A contains forward-looking statements and forward looking information within the meaning of applicable Canadian securities legislation ("forward looking statements"). Any statements that express or involve discussions with respect to predictions, expectations, beliefs, plans, projections, objectives, assumptions, potentials, future events or performance (often, but not always, using words or phrases such as "believes", "expects" or "does not expect", "is expected", "anticipates" or "does not anticipate", or "intends" or stating that certain actions, events or results "may", "could", "would", "might" or "will" be taken or achieved) are not statements of historical fact, but are "forward-looking statements". Such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause the actual results, performance or achievements of the Company, or developments in the Company's business or in its industry, to differ materially from the anticipated results, performance, achievements or developments expressed or implied by such forward-looking statements. Forward-looking statements include disclosure regarding possible events, conditions or results of operations that are based on assumptions about future conditions, courses of action and consequences. Forward-looking statements may also include, without limitation, any statement relating to future events, conditions or circumstances. The Company cautions you not to place undue reliance upon any such forward-looking statements, which speak only as of the date they are made. Forward-looking statements relate to, among other things, the successful commercialization of our technology, comments about potential future revenues, joint development agreements and expectations of signed contracts with customers etc. A variety of inherent risks, uncertainties and factors, many of which are beyond the Company's control, affect

the operations, performance and results of the Company and its business, and could cause actual results to differ materially from current expectations of estimated or anticipated events or results. Some of these risks and uncertainties include the risk of not securing required capital in future, the risks of not successfully concluding agreements with potential partners on a timely basis, the risks associated with commercializing and bringing to market our technology. These risks are affected by numerous factors beyond the Company's control: the existence of present and possible future government regulation, the significant and increasing competition that exists in the Company's business sector, uncertainty of revenues, markets and profitability, as well as those other factors discussed in this MD&A report. This list is not exhaustive of the factors that may affect any of the Company's forward-looking statements and reference should also be made to the Company's Annual Information Form (prepared and filed in the form of a Form 20-F Annual Report pursuant to The Securities Exchange Act of 1934) for a description of additional risk factors.

Although the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking statements, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that such statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements. The Company does not undertake to update any forward-looking statements that are incorporated by reference herein, except in accordance with applicable securities law.

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*(Unless other indicated dollar amounts reported are stated in U.S. dollars)*

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**1. OVERVIEW**

Micromem Technologies Inc. ("Micromem" or "the Company") is a company that has developed proprietary MRAM technology for both memory and sensor applications. The Company's shares are traded on the NASDAQ over the counter Bulletin Board (OTCBB) under the symbol MMTIF and on the CNSX under the symbol MRM. In 2007, the Company incorporated Micromem Applied Sensor Technologies Inc. ("MAST") for the purpose of moving forward with the planned commercialization of its technology.

Reference should be made to the MD&A documentation filed as of October 31, 2011 for a chronology of the Company's activities and developments between 2005-2010 and for a review of the highlights for the fiscal year ended October 31, 2011.

**2. HIGHLIGHTS – 3 MONTHS ENDED JANUARY 31, 2012**

During the quarter ended January 31, 2012:

- (a) he Company raised total financing of approximately \$610,000 including a number of Unit private placement financings and convertible bridge loan financings.
- (b) he Company issued several technical updates/releases on the status of its various projects that are under development and on certain product prototype testing that was completed successfully.
- (c) he Company capitalized a total of \$101,518 in deferred development costs during the quarter with respect to the current projects that it has under development.
- (d) he Company continues to have a substantial pipeline of development opportunities that it anticipates will translate into additional development contracts in future licensing and sales opportunities.
- (e) he Company has successfully completed its transition to IFRS reporting and is filing the current quarter financial statements under these new reporting standards.

It has restated its previously reported financial information for the relevant reporting periods in this report to conform with the IFRS presentation.

### **3. GOING CONCERN**

These consolidated financial statements have been prepared on the “going concern” basis, which presumes that the Company will be able to realize its assets and discharge its liabilities in the normal course of business for the foreseeable future.

There are material uncertainties related to adverse conditions and events that cast significant doubt about the Company’s ability to continue as a going concern for a reasonable period of time in future. During the quarter ended January 31, 2012, the Company incurred a net loss of \$24,327 (2011: \$582,616) and, as of that date, the Company has an accumulated deficit of \$79,317,844 (2011: \$78,844,241), a working capital deficiency (for this purpose defined as current assets less current liabilities excluding the reported derivative warrant liability of \$908,020 (2011: \$1,251,688) and negative cash flows from operations of \$416,029 (2011: \$542,935).

The Company will focus its development effort on existing projects in order to develop commercial applications for these projects and will continue to raise financing for operations as outlined in the notes to the financial statements at January 31, 2012.

It will be necessary for the Company to raise additional funds for the continued development, testing and commercial exploitation of its technologies. To date, the Company has raised financing through successive unit private placements, through the exercise of common share stock options and through the exercise of common share purchase warrants. It has also secured periodic term loans.

In the ensuing fiscal year, the Company anticipates that (i) it will realize initial revenues from commercialization efforts with current strategic development partners, (ii) it will monitor the timing of incurring additional expenses in keeping with its ongoing working capital position, and (iii) it will continue to secure financing in the same manner in which it has raised financing to date.

The consolidated financial statements have been prepared on a going concern basis and do not include any adjustments to the amounts and classifications of the assets and liabilities that might be necessary should the Company be unable to continue in business. If the “going concern” assumption were not appropriate for these consolidated financial statements then adjustments would be necessary to the carrying value of assets and liabilities, the reported expenses and the balance sheet classifications used. Such adjustments may be material.

### **4. SELECT FINANCIAL INFORMATION AND DISCLOSURES**

(a) *Financial Position at January 31, 2012:*

The following table sets out select unaudited financial information as at January 31, 2012 and for the 3 months then ended prepared under IFRS reporting standards.

	Quarter ended January 31, 2012	Quarter ended January 31, 2011
Interest and other income	-	339
Total expenses	444,303	567,219
Income taxes	-	-
Net loss	(444,303)	(566,880)
Warranty liability	412,076	(15,736)
Net loss and comprehensive loss	(24,327)	(582,616)
Loss per share and diluted loss per share	(0.00)	(0.01)
Weighted average number of shares outstanding	117,393,573	96,493,122
Total assets	1,016,467	592,430
Cash and cash equivalents	23,524	25,255
Working capital	(1,362,635)	(1,429,020)
Shareholders equity (deficiency)	(1,345,127)	(1,284,242)

At January 31, 2012 the Company has:

- a) 11,175,000 stock options outstanding which expire, if unexercised, between 2012-2016. The average exercise price of these options is \$0.47 per option.
- b) 28,677,659 common share purchase warrants which expire throughout 2013 if unexercised. The average exercise price of these warrants is \$0.28.

Refer also to **Tables 1 and 2** which are appended to this MD&A. Table 1 sets forth selected information from the consolidated statements of operations and deficit for the fiscal years ending October 31, 2010-2011 and for the related quarterly information through January 31, 2012. Table 2 sets forth selected information from the consolidated balance sheets for the fiscal years ending October 31, 2010-2011 and the related quarterly information through January 31, 2012.

***(b) Discussion of Operating Results***

The following table summarizes the Company's operating results for the 3 months ended January 31, 2012 and 2011.

## Discussion of operating Results

	Quarters ended January 31,	
	2012 \$000	2011 \$000
Interest and other income		1
General and administration'	90	100
Professional fees and salaries	325	396
Stock-based compensation	-	33
Research	-	15
Travel and entertainment	25	18
Foreign exchange (gain) loss	(2)	3
Amortization of property and equipment	6	12
Allowance for promissory note	-	(10)
Total expenses	444	567
Warrant recovery liability	412	(3)
Exchange gain (loss)	8	(13)
Net loss and comprehensive loss	(24)	(583)
Loss per share	(0.00)	(0.01)

*Interest and other income:* The Company remains as a pre-revenue company at January 31, 2012. It reported nil interest revenue in 2012 and a modest amount in 2011 relating to interest earned on outstanding cash balances.

*Promissory note:* The promissory note from Unotron has been fully reserved. In the quarter ended January 31, 2012, the Company booked and reserved approximately \$6,000 of interest charged on the outstanding balance due (in 2011 it recovered \$10,000 on the promissory note which it had fully reserved at the prior year end). At January 31, 2012, the outstanding balance which is fully reserved and which remains due from Unotron is approximately \$112,000. Subsequent to the quarter end, the Company issued a demand notice to collect the outstanding balance (refer to Section 15 – Subsequent Events).

*Warrant liability:* The Company, under IFRS, has calculated and reports a warrant liability recovery of \$412,000 relating to the common share purchase warrants issued in Canadian dollars. This is further discussed in Section 7 below. The comparable charge at January 31, 2011 was an expense of \$3,000.

*Operating expenses:* The Company has maintained its overhead expenses at consistent levels on a quarter over quarter basis. The current monthly burn rate on operating expenses is approximately \$120,000 per month.

*Deferred development costs:* The Company capitalized \$101,518 of deferred development costs in the quarter ended January 31, 2012 (2011: nil) relating to various projects under development.

During the quarter ended January 31, 2011, the Company did not capitalize any project costs. It booked a reserve as of October 31, 2010 to reduce the carrying value of the projects to \$221,521 and carried forward this balance to January 31, 2011.

During the fiscal year ended October 31, 2011, the Company capitalized an additional \$425,085 to report a deferred development cost of \$646,600 at the end of the fiscal year. In the quarter ended January 31, 2012, it capitalized an additional \$104,653 relating to specific projects.

Management has satisfied itself that the projects to which deferred development costs are reported meet the criteria for deferral and management expects that it will realize future revenues against each of these projects sufficient to justify the recurring values reported.

A summary of the continuity of the projects under development and the costs incurred by project for the quarters ended January 31, 2011 and 2012 are as presented below.



Projects	10/31/2010	Additions	Impairment reserve	1/31/2011
Project A	\$ 1	\$ -	\$ -	\$ 1
Project B	1	-	-	1
Project C	1	-	-	1
Project D	1	-	-	1
Project E	221,513	-	-	221,513
Project F	1	-	-	1
Project G	1	-	-	1
Project H	1	-	-	1
Project I	1	-	-	1
	\$ 221,521	\$ -	\$ -	\$ 221,521

Net Additions/			
Projects	10/31/2011	Recoveries	1/31/2012
Project A	\$ 1	\$ -	\$ 1
Project B	1	-	1
Project C	15,001	-	15,001
Project D	1	-	1
Project E	473,238	-	473,238
Project F	1	-	1
Project G	141,201	-	141,201
Project H	1	-	1
Project I	1	-	1
Project J	17,160	104,653	121,813
	\$ 646,606	\$ 104,653	\$ 751,259

**Quarterly general and administrative related expenses compare as follows (\$000)**

	2012	2011	2010
Investor relations	9	-	-
Reserve, doubtful accounts	-	9	-
Telephone	2	1	3
Insurance	18	21	21
Rent	32	11	7
Interest	16	44	-
Exchange gain/loss	2	(4)	(5)
MAST	6	5	26
All other	5	13	27
	90	100	79

**Quarterly professional, other fees and salaries related expenses compare as follows(\$000)**

	2012	2011	2010
Audit and related services	30	30	28
Legal -patent	-	-	-
Legal -other	21	16	26
President, MAST	45	45	-
Salaries and benefits	98	126	118
Management fees	113	114	109
Other	18	65	1
	325	396	282
Stock compensation expense	-	33	-
	325	429	282

**Quarterly Travel related expenses compare as follows (\$000)**

	2012	2011
Travel		
Airfare	15	11
Hotel	3	2
Meals	4	1
Transportation	3	4
	25	18

Net research and development costs compare as:

2012	\$ (75,896)
2011	\$ (106,007)

**C) Unaudited Quarterly Financial Information - Summary**

Three months ended (unaudited)	Interest and other income \$	Expenses (including tax expense \$	Loss in period \$	Loss per share \$
January 31, 2010	5,099	411,498	(406,399)	-
April 30, 2010	5,009	531,769	(526,760)	(0.01)
July 31, 2010	5,000	1,942,819	(1,937,819)	(0.02)
October 31, 2010	7,778	1,811,661	(1,845,459)	(0.02)
January 31, 2011	339	567,219	(582,616)	(0.01)
April 30, 2011	39	507,264	(507,225)	(0.01)
July 31, 2011	585	238,380	(237,795)	-
October 31, 2011	-	1,248,756	(683,021)	(0.01)
January 31, 2012	-	444,303	(24,327)	-

Refer also to Tables 1 and 2 for summarized quarterly information.

**5. LIQUIDITY AND CAPITAL RESOURCES**

*Liquidity:*

**Table 3** provides a summary of the financing that was raised during the 2009-2011 fiscal years and for the quarter ended January 31, 2012.

We currently have no cash flow from operations and will have none until we are in a position to either license or directly produce and sell products utilizing our technologies. As at January 31, 2012, our working capital deficiency was \$1,362,635 (2011: \$1,047,228).

We currently have no lines of credit in place, we must obtain financing from new

investors or from investors who currently hold outstanding options and warrants in order to meet our cash flow needs until we generate revenues.

We have granted to our directors, officers and other employees options to purchase shares at prices that are at or above market price on the date of grant. A summary of the outstanding options and warrants is provided in **Table 4**.

*Capital Resources:*

We have no commitments for capital expenditures as of January 31, 2012.

## **6. RISKS AND UNCERTAINTIES OVERVIEW**

There are a number of material risks which may individually or in the aggregate effect the long-term commercial success of the Company, both known and unknown. An investment in the Company should be considered highly speculative due to the nature of the Company's activities and its current stage of development:

*Stage of Development of Technology:*

The Company has made significant strides in developing its prototype products over the past several years in its attempt to commercialize its products with its various strategic development partners. Nonetheless, the Company at this stage has not completed such efforts to the point that it has product available for sale and there remains uncertainties as to the Company's ultimate ability to complete the development of a product that is saleable.

*Customers' Willingness to Purchase:*

We have entered into multiple joint development agreements whereby our prototype products are being subjected to rigorous testing by our partners. We have not as yet received unequivocal and firm purchase orders for our product. Some of the joint development partners that we are dealing with are private companies and there is a potential risk of those companies having to secure all of their requisite financing to support their orders and their working capital requirement.

*Patent Portfolio:*

The Company has spent a considerable amount of time, effort and incurred significant costs with respect to the maintenance and development of our intellectual property portfolio. However, given the nature of IP development, the Company is subject to continuing risks that our patents could be successfully challenged, that our patent pending files may not ultimately be granted full patent status. While we continue to make specific efforts to broaden our IP claims, this is an ongoing process and requires continued effort and vigilance. The Company does not have extensive in-house resources so as to manage its IP portfolio in this environment and has traditionally relied heavily on

its patent attorneys for these services. In October 2010, the Company's working relationship with its patent attorneys, Morgan Lewis, was discontinued. The Company has secured an alternative service provider in 2011. In the fourth quarter of 2011, the Company wrote-down the value of patent asset by \$129,033 which relates to older technology which the Company has no immediate plans to further develop.

*Financing:*

The Company has successfully raised funding over the past several years to continue to support its development initiatives and fund the Company's corporate structure and overheads. The financing environment for early stage technology companies remains challenging and there is no certainty that the Company will be able to continue to raise financing as it has in the past to continue to support its business initiatives.

*Competitors:*

The Company is subject to competition from other larger entities who have greater financial resources and more in-house technical expertise.

*Management Structure:*

The Company is highly dependent on the services of a small number of senior management team members. If one of these individuals were unavailable, the Company could encounter difficult transition processes.

*Foreign Currency Exposure:*

The Company expects to sell its products and license technologies in the United States, in Canada and abroad. The Company has not hedged its foreign currency exposure, which has not been significant to date. In future, foreign currency fluctuations could present a risk to the business.

## **7. CRITICAL ACCOUNTING POLICIES**

Our significant accounting policies are set forth in Note 3 to our consolidated financial statements and should be read in conjunction with management's discussion of the Company's critical accounting policies and estimates as set forth below.

*IFRS:*

These are the Company's first quarterly financial statements prepared in accordance with IFRS.

The accounting policies disclosed in Note 4 have been applied in preparing the financial statements for the quarter ended January 31, 2012, the comparative information presented

in these financial statements as at October 31, 2011 and for the year then ended, as at January 31, 2011 and for the three months ended and in the preparation of the opening IFRS statement of financial position at November 1, 2010 (the Company's date of transition).

In preparing the opening IFRS statement of financial position, the Company has adjusted amounts reported previously in financial statements prepared in accordance with previous Canadian GAAP. These adjustments relate to:

- (a) The accounting and measurement of warrant liability with respect to common share purchase warrants issued in conjunction with Unit private placement financings which the Company has secured, which are denominated in Canadian dollars.
- (b) The accounting and measurement of the conversion feature of the bridge loans which the Company has secured.
- (c) The presentation of foreign currency transaction adjustments with respect to those entities included in the consolidated financial statements where the function currency for such entities is different from the Company's reporting currency. In these cases, the foreign currency translation adjustment is reported in Other Comprehensive Income ("OCI").

The illustration of how the transition from previous Canadian GAAP to IFRS has affected the Company's financial position, financial performance and cash flows is set out in Note 6 to the financial statements as of January 31, 2012.

*Compound Financial Instruments:*

Compound financial instruments issued by the Company comprise convertible notes that can be converted to share capital at the option of the holder and the number of shares to be issued does not vary with changes in their fair value.

The liability component of a compound financial instrument is recognized initially at the fair value of a similar liability that does not have an equity conversion option.

The equity component is recognized initially as the difference between the fair value of the compound financial instrument as a whole and the fair value of the liability component. Any directly attributable transaction costs are allocated to the liability and equity components in proportion to their initial carrying amounts.

Subsequent to initial recognition, the liability component of a compound financial instrument is measured at amortized cost using the effective interest rate method. The equity component of a compound financial instrument is not remeasured subsequent to initial recognition.

Interest, dividends, losses and gains relating to the financial liability are recognized in profit or loss except for borrowing costs on qualifying assets which are added to asset cost. Distributions to the equity holders are recognized in equity, net of any tax effect.

*Comprehensive Income:*

Comprehensive income consists of net income and OCI. Comprehensive income is defined as the change in equity from transactions and other events from non-owner sources. OCI refers to items recognized in comprehensive income but that are excluded from net income calculated in accordance with generally accepted accounting principles.

*Foreign Currency Translation:*

The functional and reporting currency of the Company's wholly-owned foreign subsidiaries is the United States dollar. These entities are integrated foreign operations. Monetary assets and liabilities are translated into United States dollars at the rate of exchange in effect at the consolidated balance sheet dates and non-monetary assets and liabilities are translated at historical rates. Income and expenses are translated using the three month average rate of exchange per quarter, which rate approximates the rate of exchange prevailing at the transaction dates. Gains or losses resulting from translation are included in the determination of net loss for the period.

The functional currency of Micromem and of its wholly-owned subsidiary, 7070159 Canada Inc. is the Canadian dollar. The Company translates monetary assets and liabilities at the rate of exchange in effect at the end of date of the reporting period and non-monetary assets and liabilities at historical rates. Exchange gains and losses which arise on the settlement of foreign currency denominated transactions and foreign currency differences arising on translation are recognized in OCI.

*Research and Development Expenses:*

Research costs are expensed in the period incurred. Development expenses are expensed as incurred unless they meet the criteria for deferral and amortization under Canadian GAAP which is the translation of research findings or other knowledge into a plan for the technology prior to commercial production or use.

*Patents:*

Patents are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. When circumstances dictate, an impairment loss is calculated as equal to the excess of the carrying value of the assets over their undiscounted estimated future net cash flow. The Company amortizes based on our estimated useful life for patents of 5 years. In the quarter ended October 31, 2011,

the Company wrote-down the value of its patents by \$129,033 which relates to older technology which the Company has no immediate plans to further develop.

*Intangible Assets:*

Intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. When circumstances dictate, an impairment loss is calculated as equal to the excess of the carrying value of the assets over their undiscounted estimated future net cash flow. During the fiscal year ended October 31, 2011, the Company determined that it met the criteria for capitalizing development costs related to the general sensor technology the Company is pursuing and reports \$130,627 of such costs as intangible assets at January 31, 2012. Amortization is provided on a 7 year straight-line basis.

*Stock-Based Compensation:*

Stock-based compensation is recognized using the fair value method. Under this method, the Black Scholes option-pricing model is used to determine periodic stock option expense. Any compensatory benefit recorded is recognized initially as deferred share compensation in the consolidated statements of shareholders' equity and then charged against income over the contractual or vesting period.

As stock options are exercised, the Company records a charge to contributed surplus and a credit to share capital. The amount reported in each case is based on the original expense recorded when the related options were granted.

*Unit Private Placements:*

Until October 31, 2011, the Company had adopted the relative fair value approach in accounts for the value assigned to the common shares and the warrants which it had made available in the Unit private placement financings that it secured, calculated in accordance with the Black Scholes option pricing model.

Under IFRS:

- (i) The Company has adopted the residual value approach in accounting for the value assigned to the common shares and the warrants included in the Unit private placements.
- (ii) For Unit private placements which are denominated in a currency other than the US dollar reporting currency, the Company measures the value of the warrant and reports this value as warrant liability in the consolidated statement of financial position.

*Income Taxes:*



The Company accounts for income taxes by the asset and liability method. Under the asset and liability method, future tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Future tax assets and liabilities are measured using substantively enacted tax rates and laws that are expected to apply when the asset is realized or the liability settled. To the extent that it is estimated that a future income tax asset will not be realized, a valuation allowance is provided.

## **8. FINANCIAL INSTRUMENTS**

It is management's opinion that the Company is not exposed to significant interest rate and credit risks arising from financial instruments and that the fair value of financial instruments approximates the carrying value.

*Fair values:* The Company's financial instruments include: cash and cash equivalents, other receivable and accounts payable and accrued liabilities, the fair values of which approximate their carrying values due to their short-term maturity.

*Credit risk:* Financial instruments, which subject the Company to potential credit risk, consist of other receivable. The Company does not require collateral or other security for accounts receivable. The Company estimates its provision for uncollectible amounts based on an analysis of the specific amount and the debtor's payment history and prospects.

*Foreign exchange:* The Company completes transactions denominated in Canadian and in United States dollars and, as such, is exposed to fluctuations in foreign exchange rates. The Company does not use derivative instruments to reduce its exposure to foreign currency risk.

## **9. COMMITMENTS AND CONTINGENCIES**

### *Technology Development Agreement with Estancia:*

To the extent that the Company generates revenue in future relating directly and specifically to the Vemram patents, we are obligated to pay Estancia 32% of the gross profit realized less expenses agreed to by the parties and 32% of any unit royalties realized less direct expenses. To date no revenues have been generated. We have discontinued the development of this technology after 2002.

### *Operating Leases:*

The Company had operating lease commitments which expired in 2012 in respect of its head office. The monthly obligations is \$4,690 plus the proportionate cost of operating costs and taxes.

*Legal Matters:*

There are currently no outstanding legal matters to which the Company is a party. We have agreed to indemnify our directors and officers and certain of our employees in accordance with our by-laws. We maintain insurance policies that may provide coverage against certain claims.

*Royalties:*

The Company has obligations under the terms of the License Agreement signed with University of Toronto in June 2005. The total obligation could be \$1 million tied to future product revenues.

*Senior Management:*

In 2005, we entered into an employment agreement with the Chairman of the Board of Directors, Salvatore Fuda, for a period from January 1, 2005 through December 31, 2009, which contract has been extended to December 31, 2010. Under the terms of the agreement, the Chairman was retained to provide certain management services to the Company. The contract stipulated compensation based on a percentage of the increase of the market capitalization on a year-over-year basis commencing as at December 31, 2005 and subject to a minimum annual compensation amount of \$150,000 Canadian funds (\$143,877 U.S. funds at average exchange rates). Under this contract, the 2010 expense as reported was \$143,877 as compared to \$129,149 in 2009. In January 2011, the Board of Directors extended the Chairman's contract on a month-month-basis at an annual rate of \$150,000 Canadian funds.

In May 2008, the Company entered into two year employment agreements with the President and the CFO and a three year agreement with the President of the Company's subsidiary, MAST Inc. These agreements have now expired and the Company has continued these on a month-to-month basis since expiry date. These agreements stipulated monthly obligations as below:

President	\$13,333	Canadian Funds
Chief Financial Officer	\$12,500	Canadian Funds
President – MAST	\$15,000	U.S. Funds

## **10. DISCLOSURE CONTROLS / INTERNAL CONTROLS**

The Company was not classified as accelerated filer in 2011 and did not complete an external audit on its internal controls in 2011.

Management and the Board of Directors, primarily through the Audit Committee, have instituted review procedures on all of our periodic filings. We have established a disclosure committee consisting of independent directors and our Chief Information Officer. A charter for the disclosure committee and a policy has been developed and has been ratified by our Board of Directors. We engage legal counsel and our external investor relations consultants, to provide guidance, commentary on all of our press releases.

Management has concluded that our disclosure controls and procedures meet required standards. These disclosure controls and procedures are designed to provide reasonable assurance that information required to be disclosed in its various reports are recorded, processed, summarized and reported accurately. In spite of its evaluation, management does recognize that any controls and procedures, no matter how well designed and operated, can only provide reasonable assurance and not absolute assurance of achieving the desired control objectives.

#### **11. OFF-BALANCE SHEET ARRANGEMENTS**

The Company has no off-balance sheet financial commitments and does not anticipate entering into any contracts of such nature other than the addition of new operating leases for equipment and premises as may be required in the normal course of business.

#### **12. TRANSACTIONS WITH RELATED PARTIES**

The Company reports the following related party transactions:

(a) *Compensation paid:*

Included in professional fees as reported are management and consulting fees paid or payable to individuals (or companies controlled by such individuals) who served as officers and directors of the Company. The total compensation paid to such parties during the quarters ending January 31<sup>st</sup> is as follows:

(b) *Accounts receivable, payable and accruals:*

At January 31, 2012 the Company reports the following accounts receivable and payable balances with related parties:

• Payable to Company's Chairman under terms of employment contract:	\$37,005
• Payable to officer under the terms of employment contracts (1):	\$120,000

- (1) The Company assigned the Unotron promissory note to an officer of the Company during 2011. Of the total of \$110,000 of funds recovered from Unotron in 2011, \$80,000 was paid directly to that officer under this assignment. The balance due to the officer at January 31, 2012 is \$120,000.

### **13. SHARE CAPITAL**

At January 31, 2012 the Company reports 118,154,740 common shares outstanding (2011: 116,149,718). Additionally, the Company has 11,175,000 stock options outstanding with a weighted average exercise price of \$.47 per share (2011: 10,247,199 options outstanding with a weighted average exercise price of \$.89 per share) and a total of 28,677,659 outstanding warrants to acquire common shares with a weighted average exercise price of \$.28 per share (2011: 6,198,885 outstanding warrants with a weighted average exercise price of \$.51 per share).

### **14. MANAGEMENT AND BOARD OF DIRECTORS**

Our management team and directors, along with their 2011 remuneration in the quarter is presented as below:

Individual	Position	Q1 2012 remuneration		
		Cash	Option	Total
Salvatore Fuda (1)	Chairman, Director	37,005	-	37,005
Joseph Fuda (2)	President, Director	39,472	-	39,472
Steven Van Fleet (3)	President, MAST Inc., Director	45,000	-	45,000
David Sharpless	Director	-	-	-
Andrew Brandt	Director	-	-	-
Oliver Nepomuceno	Director	-	-	-
Larry Blue	Director	-	-	-
Alex dey	Director	-	-	-
Dan Amadori (2)	CFO	37,005	-	37,005

- (1) contract was extended after December, 2010 on a month to month basis.  
(2) contract was extended on a month to month basis in May 2010.  
(3) contract was extended on a month-to-month basis in May 2011.

### **15. SUBSEQUENT EVENTS**

- (a) The Company raised an additional \$444,213 through Unit private placements and issued 2,178,213 Units. Each Unit consists of one common share and one share purchase warrant.
- (b) The Company secured a \$20,092 bridge loan from an arm's length investor in February 2012 with a maturity of six months. The loan is unsecured, bears interest at a rate of 2% per month and is convertible at the holder's option at \$0.12 per unit. Each unit includes one common share and one common share purchase warrant with a one year expiry and an exercise price of \$0.15.
- (c) The Company secured a \$184,554 bridge loan from an arm's length investor in February 2012 with a maturity of six months. The loan is unsecured, bears interest at a rate of 2% per month and is convertible at the holder's option at \$0.17 per unit. Each unit includes one common share and one common share purchase warrant with a one year expiry and an exercise price of \$0.20.
- (d) Subsequent to January 31, 2012 a total of 2.7 million common stock options were cancelled. In April 2012 the Company issued 2 million stock options at an exercise price of \$0.35 per share. These options expire in April 2017 if unexercised.
- (e) In April 2012 the company issued a demand notice to enforce collection of the outstanding balance of principal and interest due under the terms of the security agreement and promissory note.

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Table 1

Micromem Technologies Inc Management Discussion and Analysis January 31, 2012
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<u>Fiscal year ending October 31</u>	<u>Interest and other income</u>	<u>Net Loss</u>	<u>Loss per share (basic and fully diluted)</u>
2011	963	(2,573,544)	(0.03)
2010	22,886	(4,674,861)	(0.05)
<b>Quarter ending</b>			
January 31, 2012	-	(24,327)	(0.00)
October 31, 2011	-	(683,021)	(0.01)
July 31, 2011	585	(237,795)	(0.00)
April 30, 2011	39	(507,225)	(0.01)
January 31, 2011	339	(582,616)	(0.01)
October 31, 2010	7,778	(1,845,459)	(0.02)
July 31, 2010	5,000	(1,937,819)	(0.02)
April 30, 2010	5,009	(526,760)	(0.01)
January 31, 2010	5,099	(406,399)	-

Table 2

Micromem Technologies Inc  
Management Discussion and Analysis January 31, 2012  
Selected Balance Sheet Information (all amounts in United States dollars)

Fiscal year ending October 31	Working capital (deficiency)	Capital assets at NBV	Other Assets	Total Assets	Shareholders equity (deficit)
2011	(1,047,228)	10,201	819,749	906,346	(1,468,966)
2010	(1,459,460)	16,686	423,548	568,336	(1,143,338)
Quarter ending					
January 31, 2012	(1,362,635)	9,098	916,429	1,016,467	(1,345,128)
October 31, 2011	(1,047,228)	10,201	819,749	906,346	(1,468,966)
July 31, 2011	(1,465,803)	11,800	622,640	717,188	(831,363)
April 30, 2011	(1,986,534)	13,451	584,470	723,762	(1,388,613)
January 31, 2011	(1,429,020)	15,102	415,945	592,430	(1,284,242)
October 31, 2010	(1,459,460)	16,686	423,548	568,336	(1,143,338)
July 31, 2010	(1,131,126)	18,808	1,596,876	1,984,874	484,558
April 30, 2010	(918,937)	20,981	2,699,602	3,060,200	1,801,646
January 31, 2010	(341,756)	23,156	2,461,488	3,010,357	2,142,888

Table 3

Micromem Technologies Inc  
Management Discussion and Analysis  
January 31, 2012

## Summary of financing raised by Company

Date of financing	2009			2010		
	Shares	Price / share	\$	Shares	Price / share	\$
<b>Exercise of options</b>						
January 2009	32,801	0.74	24,417			
April 2009	631,000	0.64	403,500			
July 2009	889,000	0.57	504,500			
August 2009	100,000	0.60	60,000			
<b>Exercise of warrants</b>						
July 2009	200,000	1.17	234,000			
<b>Private placements</b>						
January 2009	336,053	0.58	194,465			
April 2009	2,777,878	0.58	1,620,397			
July 2009	779,604	0.98	763,980			
October 2009	500,000	0.76	380,000			
January 2010				2,204,276	0.476	1,049,062
April 2010				289,899	0.448	130,000
July 2010				1,730,026	0.321	556,078
October 2010				1,717,307	0.196	335,910
	6,246,336		4,185,259	5,941,508		2,071,050
<b>2011</b>						
	Shares	Price / share	\$	Shares	Price / share	\$
<b>Private placements</b>						
January 31, 2011	2,525,000	0.199	503,140			
April 30, 2011	250,000	0.120	30,000			
July 31, 2011	8,355,045	0.112	932,554			
October 31, 2011	9,695,162	0.104	1,012,987			
<b>Private placements</b>						
January 31, 2012				2,005,022	0.107	214,478
	20,825,207		2,478,681	2,005,022		214,478



Micromem Technologies Inc  
Management Discussion and Analysis  
January 31, 2012

Outstanding options	Strike price	Expiry date
350,000	0.36	04/17/12
190,000	0.60	10/25/12
315,000	0.55	12/20/12
325,000	1.01	03/03/13
10,000	1.12	03/10/13
1,100,000	1.50	08/28/13
1,285,000	1.00	08/25/14
125,000	0.35	04/05/16
7,475,000	0.20	10/31/16
<b>11,175,000</b>	<b>0.47</b>	

Total proceeds if all options exercised: **\$ 5,226,450**

Outstanding Warrants		
123,276	0.7500	5/11/2012
600,000	0.7600	6/14/2012
772,000	0.5600	6/16/2012
43,000	0.5500	6/16/2012
25,000	0.5500	7/15/2012
300,000	0.5500	7/26/2012
111,111	0.5600	8/1/2012
133,333	0.5600	8/12/2012
429,686	1.2000	5/14/2012
765,188	0.4100	5/25/2012
339,838	0.4500	6/15/2012
312,500	0.3900	7/12/2012
312,500	0.4000	7/23/2012
200,000	0.2800	8/26/2012
1,325,000	0.2400	10/15/2011
500,000	0.2000	11/5/2011
400,000	0.1900	11/30/2011
300,000	0.2000	12/20/2011
250,000	0.2000	1/4/2013
750,000	0.2000	1/11/2012
325,000	0.2000	1/31/2012
20,000	0.2000	12/17/2011
10,000	0.2000	3/4/2012
5,000	0.2100	3/4/2012
250,000	0.1500	4/27/2012
5,100,000	0.1250	5/4/2012
100,000	0.1500	5/20/2012
300,000	0.1230	5/20/2012
790,000	0.1600	5/30/2012
1,454,545	0.1400	6/15/2012
298,000	0.2096	7/18/2012
312,500	0.2105	7/22/2012
20,000	0.2080	7/18/2012
792,938	0.2076	8/3/2012
75,000	0.1600	8/5/2012
1,666,667	0.1528	8/16/2012
1,275,000	0.1212	9/12/2012
150,000	0.1174	9/29/2012
250,000	0.1200	9/29/2012
200,000	0.1174	9/29/2012
5,118,890	0.1100	10/21/2012
166,667	0.1485	10/26/2011
1,135,022	0.1473	11/4/2012
100,000	0.1200	12/23/2012
770,000	0.1188	1/23/2013
<b>28,677,661</b>	<b>0.21</b>	

Total proceeds if all warrants exercised: **\$ 6,136,000**