

**MICROMEM TECHNOLOGIES INC.
MANAGEMENT'S DISCUSSION AND ANALYSIS
FOR THE 3 MONTHS ENDED JULY 31, 2012
PREPARED AS OF SEPTEMBER 28, 2012**

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 July 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 year ended October 31, 2011 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.

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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FOR THE 3 MONTHS ENDED JULY 31, 2012
PREPARED AS OF SEPTEMBER 28, 2012**

(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 July 31, 2012

During the quarter ended July 31, 2012:

- (a) The Company raised total financing of \$828,762 through a number of Unit private placement financings, from the exercise of common share warrants and from the conversion of debt to common shares.
- (b) The 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) The Company continues to develop and build a substantial pipeline of development opportunities that it anticipates will translate into additional development contracts in future licensing and sales opportunities.
- (d) The Company has successfully completed its transition to International Financials Reporting Standards (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.
- (e) The Company began the process of securing the sponsorship of an investment banking firm to apply for listing on the TSX Venture Exchange.
- (f) The Company relocated its head office in June 2012 to 121 Richmond Street West, Suite 304 located in downtown Toronto. It signed a favorable 5 year lease for these premises.

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 July 31, 2012, the Company reported a loss from operations of \$586,312 (2011- loss from operations of \$241,554). As of that date, the Company has an accumulated deficit of \$83,045,675 (2011: \$77,215,372), a working capital deficiency (for this purpose defined as current assets less current liabilities excluding the reported derivative warrant liability) of \$853,019 (2011: \$1,465,803)

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 July 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 July 31, 2012:

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

	Quarter ended July 31, 2012 (unaudited)	Quarter ended July 31, 2011 (unaudited)
Interest and other income	-	585
Total expenses	586,312	305,700
Stock compensation expense	-	(64,146)
Loss from operations	(586,312)	(240,969)
Warranty liability	75,736	-
Exchange gain (loss)	3,497	4,379
Income taxes		(1,205)
Net comprehensive loss	(507,079)	(237,795)
Loss per share and diluted loss per share	(0.00)	(0.00)
Weighted average number of shares outstanding	125,684,658	104,877,124
Total assets	850,064	717,188
Cash and cash equivalents	15,481	32,248
Working capital (excludes warrant liability)	(853,019)	(1,465,803)
Shareholders equity (deficiency)	(2,283,253)	(831,363)

At July 31, 2012 the Company has:

- a) 10,105,000 stock options outstanding which expire, if unexercised, between 2012-2017. The average exercise price of these options is \$0.25 per option.
- b) 26,589,041 common share purchase warrants which expire throughout 2013 if unexercised. The average exercise price of these warrants is \$0.23.

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 July 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 July 31, 2012.

(b) Discussion of Operating Results:

The following table summarizes the Company's operating results for the 3 months ended July 31, 2012, 2011 and 2010.

Discussion of operating Results

	Quarters ended July 31,		
	2012 (\$000)	2011 (\$000)	2010 (\$000)
Interest and other income	-	1	5
General and administration	181	85	95
Professional fees and salaries	353	298	374
Stock-based compensation	-	(64)	-
Research	1	(68)	-
Travel and entertainment	40	33	36
Foreign exchange (gain) loss	5	(4)	(1)
Amortization of property and equipment	1	2	2
Amortization of Intangible assets	5	-	-
Impairment of deferred development costs	-	-	1437
Interest and other income			
Recovery of promissory note	-	(60)	-
Total expenses	586	223	1943
Warrant liability (recovery)	(76)	-	-
Exchange gain (loss)	(3)	15	-
Income taxes	-	1	-
Net comprehensive loss	507	238	1,938
Loss per share	-	-	(0.02)

Interest and other income: The Company remains as a pre-revenue company at July 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 July 31, 2012, the Company booked and reserved approximately \$16,000 of interest charged on the outstanding balance due (in 2011 it recovered \$60,000 on the promissory note which it had fully reserved at the prior year end). At July 31, 2012, the outstanding balance which is fully reserved and which remains due from Unotron is \$127,554. The Company issued a demand notice to collect the outstanding balance and has received judgment in its favor as of July 31, 2012. It continues to pursue collection of the fully reserved balance. Subsequent to July 31, 2012, it received \$30,000 of payments on account from Unotron.

Warrant liability: The Company, under IFRS, has calculated and reports a warrant liability charge of \$(75,736) relating to the common share purchase warrants issued in Canadian dollars during the quarter. This is further discussed in Section 7 below.

Operating expenses: General and administration expenses and professional fees and salaries have increased in the quarter ended July 31, 2012 versus the comparable period in 2011 as further detailed later in this report. In 2011, the Company recorded a recovery of \$64,146 relating to the modification of warrants which was reflected in Q1 2011 as an expense instead of as a charge to retained earnings.

Deferred development costs: The Company capitalized \$36,365 of deferred development costs in the quarter ended July 31, 2012 relating to various different projects. In the quarter ended April 30, 2012, it reported a net recovery of \$216,302 of costs previously capitalized. These represented third party invoices originally recorded to deferred development costs which were reversed in Q2. Accordingly, the Company reports a net recovery of \$81,554 of capitalized costs for the nine month period through July 31, 2012 (2011: expenditures of \$206,694).

Current projects under development: An update on projects previously reported in our MD&A documentation and in our periodic press releases is as follows:

Progress on Current Contracts in House

- 1. Nanoparticle Concentration Application:** We received a formal change of scope from our client, a major international oil company, expanding our work scope from initially requiring us to only detect magnetic nanoparticles at extremely low concentrations in oil, to now requiring us to detect and measure the actual concentration in the stream. The revised beta version of our product development is in final test and will be shipped to the client in Q412. There is a revenue milestone payment attached to this delivery.
- 2. NEMT Aerial Exploration Platform:** All field-testing on the proof of concept was completed this summer. We are now in the process of formal commercialization of this application and have begun discussion with a third party, outside of NEMT, who will license and market the product development for MAST.
- 3. Breast Aware Technology:** We are in the process of consummating a product commercialization and production agreement with a European country that will roll this product out to various regional constituents.
- 4. Oil Condition Sensor:** We received a formal purchase order from a major automotive company to demonstrate our MEMS based sensor platform capable of measuring automotive oil condition along with oil pan level. Our engine oil loop lab bench setup has been assembled and our client will be receiving process data during October. Once the client approves our prototype sensor, our plans are to design, fabricate a MEMS chip that will fit within an oil pan plug on.

5. **GSI Westwind:** Our prototype product development contract is complete. We have released our product to routine production and will begin delivering volume based within 8 weeks.

Business development Updates

1. **Proposal Pipeline:** Our new business proposal pipeline remains robust and is growing in value. It is currently at \$75.8 M USD.
2. **Oil Exploration Company:** We are negotiating with a global oil exploration company for the development and productization of a cement integrity sensor. This nano-sized sensor will be pumped with cement into the bore annulus of undersea oil wells and will be used to report for many years on the integrity of the cement lining of the oil well. This project is scheduled to kick off in late Q412.
3. **Global Power Distribution Company:** We are in the final stage of negotiation with a multi-national high power transmission and distribution company. We are providing a customized sensor platform that will be used to detect imminent failure of a section of transmission line as a result of line sagging. MAST has demonstrated to the client our patented orthogonal Time Domain Reflectometry sensor platform that can detect line sagging as small as 10 cm on 1-4 km line segments. We expect to begin work in late Q412.
4. **Japanese High Performance Urban Infrastructure and Environmental Products Company:** We have been selected for the final round of technology evaluation for being able to power residences wirelessly. Our solution leverages our patented sensor base and will help to significantly reduce the cost of home construction.
5. **Miniature Hall Sensors:** We are in the final stages of technology evaluation for a global manufacturer that has a requirement for extremely small Hall sensors. MAST's Hal sensor is already smaller than their requirement. We have led the competitive testing so far through the evaluation. A decision to move forward is expected in 2012. Annual production volume is estimated to begin at 8-10 million units.
6. **World Leader in Industrial Automation Equipment and Electronic Component Business:** MAST has been chosen to produce a prototype of what will be the world's smallest current sensor device. This MAST product will ultimately be designed and manufactured in a MEMS format and will have the capability to communicate remotely. Work is anticipated to begin in Q412.
7. **Remote Medical Monitoring of Aged Patients:** MAST submitted a proposal to a global medical company for innovative ideas on how to monitor our aging population, particularly those that are suffering from some form of medical condition. Our proposal has made it through the first 2 of 3 rounds of technology evaluation. This work is scheduled to begin in Q113.
8. **Global Pharmaceutical Company:** Our technology has been selected for final evaluation with this company. We proposed an extremely accurate weighing system that is capable of accurately measuring 500 nanograms and making over 1

million routine measurements per year. The contract is scheduled to close in Q412.

9. **DARPA:** MAST submitted a design and build proposal to the US government for a Non-invasive electromagnetic encephalogram. This would be a wearable that veterans who have prosthetics would wear. The intent is to capture the brain wave and use them to effectively manipulate the prosthetics.
10. **Department of Defense:** MAST's technology was selected by the DOD for standoff sensor that can detect disturbed ground. The contract has been put on hold pending the US election and a determination of available funds as a result of budget sequestration.
11. **Major Global Automotive Manufacturer:** MAST submitted a technology proposal for improvements in driver visibility during periods of rain, fog and other bad weather. Our proposal for using UV LIDAR with a combination sonar and radar was selected for final round technology evaluation. This project is scheduled to begin in March 2013.

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 July 31, 2011 and 2012 are as presented below.

Projects	10/31/2010	Additions	Impairment reserve	7/31/2011
Project A	\$ 1	-	\$ -	\$ 1
Project B	1	-	-	1
Project C	1	17,721	-	17,722
Project D	1	-	-	1
Project E	146,604	22,564	-	169,168
Project F	1	-	-	1
Project G	1	141,200	-	141,201
Project H	1	-	-	1
Project I	74,908	46,429	-	121,337
Project J	1	-	-	1
Project K	1	202	-	203
Project L				
	\$ 221,521	\$ 228,116	\$ -	\$ 449,637

Projects	Net		
	10/31/2011	Additions/ Recoveries	7/31/2012
Project A	\$ 1	\$ -	\$ 1
Project B	1	-	1
Project C	15,001	867	15,868
Project D	1	-	1
Project E	176,604	3,270	179,874
Project F	1	-	1
Project G	141,201	(141,200)	1
Project H	1	-	1
Project I	296,633	27,988	324,621
Project J	1	-	1
Project K	17,161	23,882	41,043
Project L	-	13,044	13,044
	<u>\$ 646,606</u>	<u>\$ (72,149)</u>	<u>\$ 574,457</u>

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

	2012	2011	2010
Investor relations	-	-	-
Reserve, doubtful accounts	6	(4)	-
Telephone	2	3	5
Insurance	16	20	22
Rent	16	-	-
Interest	33	28	29
Exchange gain/loss	-	-	5
MAST	9	8	9
Sponsorship	73	-	-
Moving expenses	8	-	-
All other	18	30	25
	<u>181</u>	<u>85</u>	<u>95</u>

In the quarter ended July 31, 2012, the Company initiated the process of applying for a TSX Venture Exchange listing. It incurred approximately \$73,000 in sponsorship related costs in the quarter.

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

	2012	2011	2010
Audit and related services	42	32	32
Legal -patent	-	-	-
Legal -other	7	1	2
President, MAST	58	45	-
Salaries and benefits	108	91	132
Management fees	113	119	110
Other	25	10	33
	353	298	309

In the quarter ended July 31, 2012 the Company paid the President of MAST an additional \$13,241 of compensation beyond the minimum amounts stipulated in the compensation plan in effect (refer to section 14). In 2010, his compensation was reported in deferred development costs.

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

	2012	2011	2010
Travel:			
Airfare	19	23	15
Hotel	7	4	6
Meals	9	2	3
Transportation	5	4	12
	40	33	36

C) Unaudited Quarterly Financial Information - Summary

Unaudited Quarterly Financial Information - Summary

Three months ended (unaudited)	Interest and other income \$	Expenses	Loss in period \$	Loss per share \$
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	(1,803,883)	(0.02)
January 31, 2011	339	580,107	(579,768)	(0.01)
April 30, 2011	39	507,264	(507,225)	(0.01)
July 31, 2011	585	241,554	(237,795)	-
October 31, 2011	-	1,248,756	(683,021)	(0.01)
January 31, 2012	-	444,303	(24,327)	-
April 30, 2012	-	1,014,520	(2,849,835)	(0.02)
July 31, 2012	-	586,312	(507,079)	-

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 current year to date through July 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 July 31, 2012, our working capital deficiency (excluding derivative warrant liability) was \$853,019 (2011: \$1,465,803).

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 July 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 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 4 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:

IFRS reporting has been adopted effective November 1, 2010.

The accounting policies disclosed in Note 4 have been applied in preparing the financial statements for the quarter ended July 31, 2012, the comparative information presented in these financial statements as at October 31, 2011 and for the year then ended, as at April 30, 2012 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 functional 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 July 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 IFRS 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 \$120,951 of such costs as intangible assets at July 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 receivables 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 receivables. 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

Operating Leases:

The Company entered into a new five year lease in June, 2012 at a base monthly cost of approximately \$3,800.

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 was 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 a minimum annual compensation amount of \$150,000 Canadian funds (\$143,877 U.S. funds at average exchange rates). 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 is not classified as accelerated filer in 2011 or in 2012 and did not complete an external audit on its internal controls in 2011. It filed its last audit report on internal controls in 2010.

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. 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, as required, to provide guidance and commentary on 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 compensation paid to such parties during the quarter ending July 31st is as outlined above.

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

At July 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:	\$37,392
• Payable to officer under the terms of employment contracts (1):	\$113,189

(1) The Company assigned the Unotron promissory note to this officer of the Company during 2011.

13. SHARE CAPITAL

At July 31, 2012 the Company reports 127,944,710 common shares outstanding (2011: 106,454,556). Additionally, the Company has 10,105,000 stock options outstanding with a weighted average exercise price of \$.25 per share (2011: 4,075,000 options outstanding with a weighted average exercise price of \$1.11 per share) and a total of 26,589,039 outstanding warrants to acquire common shares with a weighted average exercise price of \$.23 per share (2011: 16,977,475 outstanding warrants with a weighted average exercise price of \$.28 per share).

14. MANAGEMENT AND BOARD OF DIRECTORS

Our management team and directors, along with their 2012 remuneration in the quarter is presented as below:

Individual	Position	Q3 2012 remuneration		
		Cash	Option	Total
Salvatore Fuda (1)	Chairman, Director	36,838	-	36,838
Joseph Fuda (2)	President, Director	39,294	-	39,294
Steven Van Fleet (3)	President, MAST Inc., Director	57,820	-	57,820
Andrew Brandt	Director	-	-	-
David Sharpless	Director	-	-	-
Larry Blue	Director	-	-	-
Oliver Nepomuceno	Director	-	-	-
Alex Dey	Director	-	-	-
Dan Amadori (2)	CFO	36,838	-	36,838

- (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

The Company reports the following as subsequent events:

- a) Its secured unit private placement financing of \$102,000. A total of 728,572 units including one common share at \$0.14 per share and one common share purchase warrant at \$0.17 per share were issued as consideration. The warrants have a twelve month term from issue date.
- b) A total of 937,813 previously issued warrants at a strike price of \$0.14 per share were exercised and the Company realized proceeds of \$136,378.
- c) A total of 7,284,655 outstanding warrants were extended for a twelve month period. The strike price of the warrants exceeded the market price of the shares at the extension date, and ranged in price from \$0.19 to \$0.80 per share.
- d) The Company recovered \$30,000 from Unotron as partial payment against its outstanding note receivable from Unotron.

Table 1

Micromem Technologies Inc Management Discussion and Analysis July 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	(3,139,279)	(0.03)
2010	22,886	(4,674,861)	(0.05)
 Quarter ending			
July 31, 2012	-	(507,079)	(0.00)
April 30, 2012	-	(2,849,835)	(0.02)
January 31, 2012	-	24,327	0.00
October 31, 2011	-	(1,248,756)	(0.01)
July 31, 2011	585	(237,795)	-
April 30, 2011	39	(507,225)	(0.01)
January 31, 2011	339	(541,040)	(0.01)
October 31, 2010	17,886	(2,737,042)	(0.02)
July 31, 2010	5,000	(1,937,819)	(0.02)

Table 2

<p>Micromem Technologies Inc Management Discussion and Analysis July 31, 2012 Selected Balance Sheet Information (all amounts in United States dollars)</p>

Fiscal year ending October 31	Working capital (deficiency)	Capital assets at NBV	Other Assets	Total Assets	Shareholders equity (deficit)
2011	(2,298,916)	10,201	819,749	906,346	(1,468,966)
2010	(1,459,460)	16,686	423,548	568,336	(1,019,226)
Quarter ending					
July 31, 2012	(853,019)	6,892	705,677	850,064	(2,283,253)
April 30, 2012	(1,086,547)	7,995	692,155	828,130	(3,126,710)
January 31, 2012	(2,270,655)	9,098	916,429	1,016,467	(1,345,129)
October 31, 2011	(1,047,228)	10,201	819,749	906,346	(217,278)
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	(997,973)
October 31, 2010	(1,459,460)	16,686	423,548	568,336	(1,019,226)
July 31, 2010	(1,131,126)	18,808	1,596,876	1,984,874	484,558

Table 4

Micromem Technologies Inc Management Discussion and Analysis July 31, 2012
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Outstanding options	Strike price	Expiry date
190,000	0.60	10/25/12
315,000	0.55	12/20/12
125,000	0.35	04/05/16
2,000,000	0.35	04/10/17
7,475,000	0.20	10/31/16
10,105,000	0.25	

Total proceeds if all options exercised:	\$ 2,526,000
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Outstanding Warrants		
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123,276	0.7500	11/11/2012
600,000	0.7600	12/14/2012
772,000	0.5600	12/14/2012
43,000	0.5500	12/14/2012
25,000	0.5500	1/15/2013
300,000	0.5500	1/26/2013
111,111	0.5600	2/1/2013
133,333	0.5600	2/12/2013
429,686	1.2000	5/14/2012
765,188	0.4100	11/25/2012
339,838	0.4500	12/15/2012
312,500	0.3900	1/12/2013
312,500	0.4000	1/12/2013
200,000	0.2800	8/30/2012
1,325,000	0.2400	10/15/2012
500,000	0.2000	11/5/2012
400,000	0.1900	11/30/2012
300,000	0.2000	12/20/2012
250,000	0.2000	1/4/2013
750,000	0.2000	1/11/2013
325,000	0.2000	1/31/2013
95,000	0.1500	4/27/2013
1,861,500	0.1250	5/4/2012
290,000	0.1600	5/30/2012
298,000	0.2096	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	10/26/2012
1,135,022	0.1473	11/4/2012
20,000	0.2000	12/17/2012
100,000	0.1200	12/23/2012
770,000	0.1188	1/23/2013
58,824	0.2000	2/8/2013
29,412	0.2000	2/8/2013
142,858	0.4400	2/10/2013
600,000	0.1800	2/15/2013
66,667	0.1800	2/15/2013
208,333	0.3000	2/27/2013
83,333	0.3000	3/13/2013
208,333	0.3000	3/13/2013
58,333	0.3000	3/13/2013
83,333	0.3000	4/8/2013
41,667	0.1500	2/3/2013
35,000	0.1500	2/3/2013
145,833	0.3000	2/27/2013
208,333	0.3000	2/27/2013
208,333	0.3000	2/27/2013
208,333	0.3000	5/11/2013
1,120,000	0.1200	7/12/2013
500,000	0.2500	7/13/2013
26,589,041	0.23	

Total proceeds if all warrants exercised:	\$ 6,092,285
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