



FOR IMMEDIATE RELEASE

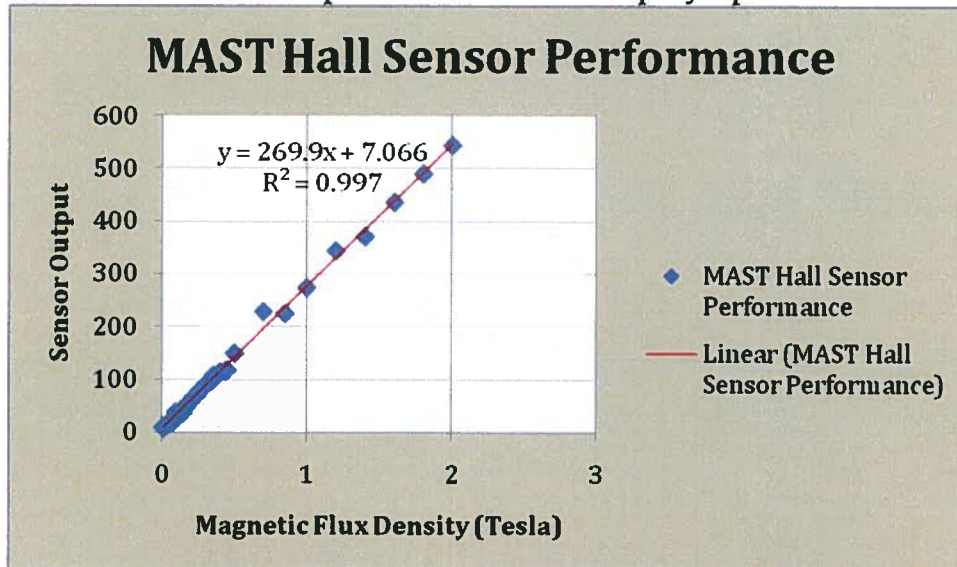
March 23, 2012

Micromem Technologies Inc. Releases Third Party Validation of New Product

“The Company’s Technology is Under Review by 2 Multi-Billion Dollar Automotive Manufacturers”

Toronto, New York, March 23, 2012: Micromem Technologies Inc. (the “Company”) (CNSX: MRM, OTCBB: MMTIF) through its wholly owned subsidiary Micromem Applied Sensor Technologies Inc., announces today the results from a third party test and validation of the Company’s latest patented magnetic sensor. Measuring only 75 microns thick and with sensing arms as small as 250 nanometers wide, this extremely small sensor footprint has shown near perfect linearity in its ability to produce a reliable and repeatable sensor output when subjected to a wide range of and varying magnetic flux density fields.

This chart illustrates the performance of the Company’s patented sensor:



There are applications with various sizes of electric motors wherein sensors need to be inserted into very small gaps in order to measure wide range magnetic flux density which is time varying inside the drive motor during operation. This application is currently under review by a multi-billion dollar global automotive manufacturer.

In addition a second global automotive manufacturer is finalizing the review and execution of a development contract for a specific proof of concept to meet their needs. This application is based on the same patented sensor technology.

The Company's sensor has been validated to operate in a wide magnetic flux density range, varying almost 7 orders of magnitude from less than 5 nano Tesla to 2.1 Tesla. Previously released third party tests completed at SENIS in Switzerland and at BAE Systems in Nashua NH indicated the Micromem sensor was highly effective at discerning low level signals in a noisy field environment. In addition past work has been focused on the low diminishing magnetic field measurement capabilities.

The most recent tests of the Company's technology showed nearly perfect linearity through to fields approaching the lower level of MRI magnet strength. This opens up multiple new marketing opportunities for Micromem and when combined with its market leading small footprint, provides clients seeking to obtain measurement technologies for magnetic flux density inside drive motors with innovative ways to continuously improve motor performance.

This high end magnetic flux density testing was recently validated by GMW Associates www.gmw.com. GMW is a distributor and integrator of sensors, transducers, instruments and magnetic based systems. Products and support are provided for: non-contact, isolated sensing of mechanical position and magnetic material; magnetic field and magnetic property measurement; electric current measurement and control; magnetic field generation and control; and particle beam control and acceleration.

GMW Associates achieved ISO 9001:2008 Certification in November 2011.

About Micromem and MASTInc

MASTInc is a wholly owned U.S.-based subsidiary of Micromem Technologies Inc., a publicly traded (OTC BB: MMTIF, CNSX: MRM) company. MASTInc responsibly analyzes the specific industry sectors to create intelligent game-changing applications that address unmet market needs. By leveraging its expertise and experience with sophisticated magnetic sensor applications, MASTInc successfully powers the development and implementation of innovative solutions for healthcare/biomedical, natural resource exploration, government, information technology, manufacturing, and other industries. Visit www.micromeminc.com www.mastinc.com.

Safe Harbor Statement

This press release contains forward-looking statements. Such forward-looking statements are subject to a number of risks, assumptions and uncertainties that could cause the Company's actual results to differ materially from those projected in such forward-looking statements. In particular, factors that could cause actual results to differ materially from those in forward looking statements include: our inability to obtain additional financing on acceptable terms; risk that our products and services will not gain widespread market acceptance; continued consumer adoption of digital technology; inability to compete with others who provide comparable products; the failure of our technology; the infringement of our technology with proprietary rights of third parties; inability to respond to consumer and technological demands; inability to replace significant customers; seasonal nature of our business; and other risks detailed in our filings with the Securities and Exchange Commission. Forward-looking statements speak only as of the date made and are not guarantees of future performance. We undertake no obligation to publicly update or revise any forward-looking statements. When used in this document, the words "believe," "expect," "anticipate,"

“estimate,” “project,” “plan,” “should,” “intend,” “may,” “will,” “would,” “potential,” and similar expressions may be used to identify forward-looking statements.

The CNSX or any other securities regulatory authority has not reviewed and does not accept responsibility for the adequacy or accuracy of this press release that has been prepared by management.

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Listing: NASD OTC-Bulletin Board - Symbol: MMTIF
CNSX - Symbol: MRM

Shares issued: 120,264,999

SEC File No: 0-26005

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