



FOR IMMEDIATE RELEASE

November 10, 2008

Micromem Subsidiary Signs Joint Development Agreement with Mining Exploration Company

MASTInc to Provide Next Generation, Real-Time Magnetic Sensor Technology for Gold and Precious Metal Discovery

TORONTO/NEW YORK, November 10, 2008-[Micromem Technologies Inc.](#), (OTC BB:[MMTIF](#)) through its wholly owned U.S. subsidiary, Micromem Applied Sensor Technologies, Inc. (MASTInc), has signed a Joint Development Agreement (JDA) with a private Canadian mining exploration company. Due to the overwhelming interest MASTInc has received and potential exploration ramifications of the development of this technology, both companies have entered into a confidentiality agreement while the technology is being field tested.

The collaborative agreement, executed on November 4, 2008, will enable the two companies to explore the opportunity of integrating MASTInc's advanced sensing technology into a mining sensor for gold and other precious metals. This partnership has been created with the objective to improve the performance of drilling operations, reduce drilling and assay analysis cost, and radically change the mining exploration model. Per the agreement, the two companies will perform extensive sensor "training" and signature database development using the exploration company's access to a vast assayed core database compiled from several different mining exploration projects.

"This aggressive exploration company has access to a significant portfolio of core samples," commented Steven Van Fleet, President of MASTInc. "The size of this core database will ultimately be a huge advantage for MASTInc, as the bigger the library we create, the higher the performance and capabilities our device will have. The signing of this agreement and the overwhelming interest we have received is testament to the adaptability of our magnetic sensor and the variety of applications in which it can be used. Our technology uses a very fast, low powered sensor array that offers a unique solution to dramatically improve the approach to mineral and natural resource exploration. Akin to comparing a telescope to binoculars, the sensitivity of our advanced technology will provide a significant improvement, potentially allowing mining companies to 'see' more than the current exploration technology used throughout the industry today. We look forward to developing an advanced mining sensor product that will ultimately provide efficiencies in making mining exploration projects successful."

About Micromem and MASTInc

MASTInc is a wholly owned U.S.-based subsidiary of Micromem Technologies Inc., a publicly traded (OTC: [MMTIF](#)) fabless semiconductor company with headquarters in Toronto, Canada

and an office in New York City. Micromem holds and continues to develop a broad-based patent portfolio of Magnetoresistive Random Access Memory (MRAM) and magnetic sensor technologies. Micromem's MRAM patents create a solution for performance driven, radiation hard, non-volatile memory applications. MASTInc is focused on business development efforts and is working on the launch of sensory products for use in both defense and consumer applications. Its first product, GC-0301, is far superior to the competition with over 200 V/T, making it one of the most sensitive hall sensors on the market without the need for external amplification. MASTInc is working with companies that have large-scale capabilities and expects to sign contracts in the coming quarters.

Listing: NASD OTC-Bulletin Board - Symbol: MMTIF

Shares issued: 83,186,667

SEC File No: 0-26005

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, 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.

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