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FOR IMMEDIATE RELEASE

MICROMEM POSITIONS FOR COMMERCIAL SUCCESS

--Sets the Stage for MRAM Commercialization --

TORONTO, CAN, December 21, 2005 -- Micromem Technologies Inc. (OTC-BB:MMTIF) a Toronto-based developer of magnetic random access memory (MRAM), has set the stage for commercialization of the firm's magnetic memory (MRAM) technology for 2006.

The company is pursuing its strategic joint development agreements with potential partners in the market segments of RFID, sensors and high performance MRAM. Such collaborations would accelerate the company's development efforts. We believe we have made progress in pursuing these opportunities and hope to conclude finalizing our relationships in a satisfactory manner.

"This has been an important year. We are now ready to accelerate our efforts to commercialize our product by securing our technology position, identifying new and emerging markets, and initiating strategic discussions within those markets," said Joseph Fuda, Micromem CEO, "We have strengthened our talent base and positioned ourselves to work towards commercial development and deployment of our MRAM technology. I am confident we are at the right place at the right time."

The company has also recognized a need to improve its web based communications outreach and has redesigned its website to provide regular updates to potential business partners and other interested constituencies. The new site will deliver regular updates from the office of the CTO, expand technology discussions on magnetic memory and technology, highlight in depth Micromem's management team, and provide new tools for communication and discussion. The new site, www.micromeminc.com, will be available today.

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Micromem has also recently focused on strengthening its talent base of the company by adding new skills to its organization. Larry Blue, vice president and general manager, Symbol Technologies Inc. has been named to the company's board of directors. This appointment reflects a growing appreciation of Micromem's potential for commercial MRAM development. Micromem also recently extended the appointment of Steven Van Fleet as a senior RFID advisor to the company's board of directors.

Listing: NASD OTC-Bulletin Board - Symbol: "MMTIF"

Shares issued: 64,719,449

SEC File No: 0-26005

About Micromem Technologies Inc.

Micromem Technologies, Inc. (www.micromeminc.com) is focused on the development of magnetic random access memory (MRAM) technology. Once fully developed, this technology should be suitable for various applications including, without limitation, Radio Frequency Identification (RFID) as well as other applications. It is anticipated that RFID will be Micromem's first market objective. Micromem's primary technology is pursuant to an exclusive world wide commercial license from the University of Toronto (UT). Pursuant to the terms of the license, Micromem can buy out the balance of the Company's financial obligations with respect to the patents and technology licensed by UT for a fixed fee. The MRAM development work is and has been undertaken in accordance with research collaboration agreements among Micromem, the University of Toronto, Dr. Harry Ruda and OCE Inc., a not-for-profit corporation supported through the Ontario Ministry of Economic Development and Trade's (MEDT) Ontario Centres of Excellence program. Micromem has full control over the last three years of the technological innovations arising from the MRAM development work, including the development of the single bit memory prototype previously announced. Micromem has worldwide exclusivity on all prior, current, and future patent applications relating to this MRAM technology.

Statements in this news release that are not historical facts, including statements about plans and expectations regarding products and opportunities, demand and acceptance of new or existing products, capital resources and future financial results are forward-looking. Forward-looking statements involve risks and uncertainties, which may cause Micromem's actual results in future periods to differ materially from those expressed or suggested herein. These uncertainties and risks include, without limitation, the inherent uncertainty of research, product development and commercialization, the impact of competitive products and patents, our ability to fund our current and future business strategies and respond to the effect of economic and business conditions generally as well as other risks and uncertainties detailed from time to time in Micromem's filings with the Securities & Exchange Commission. For more information, please refer to Micromem's Annual Report on Form 20-F and its Form 6-Ks as filed with the U.S. Securities and Exchange Commission. Micromem is under no obligation (and expressly disclaims any obligation) to update or revise any forward-looking statements whether as a result of new information, future events or otherwise.

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