



FOR IMMEDIATE RELEASE

**MICROMEM SUBSIDIARY ANNOUNCES MOST SENSITIVE HALL SENSOR
AVAILABLE ON THE MARKET**

TORONTO, ONTARIO, August 28, 2008 – Micromem Technologies Inc. [OTC BB: MMTIF] through its wholly owned U.S. subsidiary, Micromem Applied Sensor Technologies Inc. (“MAST Inc.”), announced today the availability of its first market sensor with the release of the attached product specification GC-0301. The GC-0301 has a Hall Sensitivity Co-efficient of over 200 V/T which makes it the most sensitive hall sensor on the market without the need for external amplification.

MAST Inc. is targeting unmet sensing and analytical needs in both the military and commercial market spaces. MAST Inc. expects to announce a series of partnerships that will include the world’s first sensing device that will solve design issues that currently exist in the industry. In addition, the company will also be issuing revenue numbers as it relates to each of the respective partnership announcements.

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

Shares issued: 82,323,779

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) and sensor 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. There can be no guarantee that Micromem will be able to enter into any commercial arrangements on terms that are favorable to it, or at all. 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.