



**FOR IMMEDIATE RELEASE**

**September 17, 2007**

**MICROMEM ENGAGES GLOBAL COMMUNICATION SEMICONDUCTORS, INC.  
AS ITS FOUNDRY IN THE NEXT STEP OF COMMERCIALIZATION**

TORONTO, ONTARIO, September 17, 2007 – Micromem Technologies Inc. [OTC BB: MMTIF] is pleased to announce that it has engaged Global Communication Semiconductors, Inc. (GCS), for its next stage of MRAM development. GCS is a California based compound semiconductor pure-play wafer foundry that provides services to the RF wireless communication sector, telecommunication and high-speed networking, optoelectronics and photonics industries. As the premier gallium arsenide foundry in North America, GCS provides foundry services to leading companies in a variety of industries ranging from RF wireless and infrastructure, optical fiber communication, aerospace and defense to medical devices.

“We are very pleased to be working with Micromem and taking its technology from the laboratory and moving it towards commercialization and ultimately production”, said Jerry Curtis, President and CEO of GCS.

This is a milestone achievement for Micromem as it takes the company’s technology out of the laboratory and shifts it into a manufacturing facility. GCS will design and build a commercial MRAM device utilizing Micromem’s patented technology. Micromem and GCS will work closely with specific potential partners, using their specifications, to design a commercial product that can be brought to market. Micromem anticipates on commencing fabrication by the end of this year.

For further information contact: Jason Baun, Chief Information Officer 1-877-388-8930

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

Shares issued: 73,268,799

SEC File No: 0-26005

**About Global Communication Semiconductors, Inc.**

Global Communication Semiconductors, Inc., based in Torrance, California, an ISO 9001-2000 certified company, provides compound semiconductor foundry services to the RF wireless communication, telecommunication and high-speed networking, optoelectronics and photonics industries. GCS currently offers a broad portfolio of advanced RF processes (InGaP HBT, PHEMT, IPD and SAW), and various optoelectronics processes for products such as GaAs and InGaAs PIN PD and imaging array, APD, VCSEL, Laser, modulator, QWIP and LED. Additional information can be found at [www.gcsincorp.com](http://www.gcsincorp.com)

**About Micromem Technologies Inc.**

Micromem Technologies, Inc. ([www.micromeminc.com](http://www.micromeminc.com)) is focused on the development of magnetic random access memory (MRAM) technology. We believe that once fully developed, this technology will be suitable for various applications including, without limitation, Radio Frequency Identification (RFID) It is anticipated that RFID will be Micromem’s first market objective. Micromem’s primary technology was developed pursuant to an exclusive world wide commercial license issued by the University of Toronto (“UT”). Pursuant to the terms of the license, Micromem can buy out the balance of its financial obligations with respect to the patents and technology licensed by UT for a fixed fee. The MRAM development work was 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.

*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.*