



**MEMSCAP ENTERS FIBER OPTIC SOURCE MARKET  
WITH RECORD-BREAKING TECHNOLOGY FOR METRO AND ACCESS LAYERS**

**Exclusive Agreement with Finland's ORC Yields RC-LED, VCSEL Products  
For Plastic Optical Fiber**

GRENOBLE, France and OAKLAND, Calif., June 6, 2001 – MEMSCAP, S.A. (Euronext: MEMS), an innovative provider of MEMS-based products for the fiber optic and wireless communications markets, today announced the availability of low-cost optical sources optimized for plastic optical fiber (POF).

The products enable customers to deploy high-transmission speed, eye-safe optical sources inexpensively throughout the high-growth metro and access levels of the network, where residences, large businesses, and telco central offices may require tens to thousands of source components per site.

The available products, licensed from Finland's premier Optoelectronic Research Centre (ORC), include record-breaking resonant-cavity light emitting diodes (RC-LEDs) operating at 650 nanometers, and vertical-cavity surface emitting lasers (VCSELs) operating at 690 nanometers. These products currently can be manufactured for customers in low volume using ORC's advanced fabrication facilities.

Additionally, MEMSCAP and ORC have in development a range of edge- and microcavity-based emitters in a variety of materials, operating at cutting-edge speeds and covering the transmission windows for most of the fiber types. The companies are also working jointly on MEMS-based tunable sources for the deployment of wavelength division multiplexing (WDM) technology.

“By licensing and immediately commercializing these first-rate ORC products we expect to achieve multiple goals and a unique market position” said Jean-Michel Karam, president and CEO of MEMSCAP. “First, it allows us to offer cost-effective MEMS-based and microstructure-based products along the entire photonic chain; second, we are able to be a single-stop optical components provider for both long-haul and metro markets; and third, MEMSCAP's and ORC's existing technology and patents will permit us to move in whatever direction the standards bodies decide for metro and access layers.”

The telecommunications industry is actively seeking enabling technology for the metro and access level layers of the all-optical network. As long-haul optical technology is too expensive for deployment at myriad local levels, the market is looking to inexpensive POF to reach into businesses and homes. Vertically emitting source components offer more cost advantages for POF -- per wafer yields are higher, testing can be done on-wafer to save time. Additionally, emitted optical beams are by nature more compatible for coupling into the optical fiber, and vertically emitting sources can be easily incorporated in high-density arrays.

“MEMSCAP’s RC-LEDs in particular offer several advantages for short-haul polymethyl methacrylate (PMMA) POF transmission,” said Mihail Dumitrescu, director, active optical components, MEMSCAP Oy. “These benefits include operation at the fiber’s attenuation minimum, flexibility in alignment, a 30 percent coupling efficiency without any supplementary optics, eye safety and robustness. These RC-LEDs have a high efficiency at 9.5% and hold the world record in speed for red wavelength range spontaneous emitters, achieving error-free transmission rates beyond 622Mbps.”

The company’s red wavelength range VCSEL products can be extended to 670 nanometers and 650 nanometers and offer good compatibility with PMMA POF. Products for the perfluorinated (PF) POF at 1000 nanometers and for silica glass fiber at 1300 nanometers are also in development.

MEMSCAP’s source component products are available on a custom manufacturing basis.

#### **About MEMSCAP**

MEMSCAP, the Telecom MEMS Company™, is an innovative provider of micro-electro-mechanical systems (MEMS)-based solutions for the design, development and manufacture of telecommunications products. MEMSCAP solutions include components, component designs (IP), and CAD design tools and related services. MEMSCAP customers include Fortune 500 businesses, major research institutes and universities. The company's shares are traded on Euronext under the ticker symbol MEMS. More information on the company's products and services can be obtained at <http://www.memscap.com>.

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