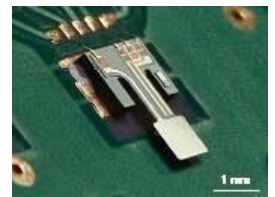


## GIT Japan Uses CAST 8051 in AIST's MEMS-EFS Electrostatic Sensor

Woodcliff Lake, NJ and Rittoh, Japan — March 19, 2014 — GIT Japan has used an [8051 IP core](#) licensed from CAST, Inc. in a custom chip GIT developed for Japan's National Institute of Advanced Industrial Science and Technology (AIST).

The 8051-managed chip implements AIST's research on applying Micro-Electro-Mechanical Systems Electrostatic Field Sensors (MEMS-EFS) to detecting and measuring static charges. The system employs self-sensitive piezoelectric microcantilevers and detects and processes the charge produced by their vibration to yield an output voltage proportional to the intensity of the detected electro-static field.



Piezoelectric MEMs static sensor developed by AIST (used with permission).

“CAST's efficient, easy-to-use 8051 core was an excellent solution for our challenge of building AIST's innovative electrostatic field sensor system,” said Yoshinori Nakagawa, design engineer for GIT Japan.

AIST's [published research project](#) was supported by the Funding Program for World-Leading Innovative R&D on Science and Technology (FIRST Program), initiated by Japan's Council for Science and Technology Policy (CSTP). Learn more about AIST at <http://www.aist.go.jp>.



**GIT Japan Inc.** is based in Rittoh, Japan, and has offices in Yokohama and Osaka and in San Jose, California. The company offers LSI semiconductor and high-density circuit board design and manufacturing services, and is a leading developer of ultra-wide-band (UWB) technology. Learn more at [www.git-inc.com](http://www.git-inc.com).



Semiconductor intellectual property provider **CAST, Inc.** is a world leader in 8051 IP products and experience. These are part of CAST's royalty-free IP core and subsystem product line that also features 32-bit BA2x processors, H.264 and JPEG compression, system interconnects and peripherals, and more. Call CAST at +1 201.391.8300 or visit [www.cast-inc.com](http://www.cast-inc.com), or follow [@castcores](#) on Twitter for more information.     # # #