

Enhanced Micron CMOS Image Sensor Enables Innovative New Medical Device

January 17 2005

Micron Technology, Inc., today announced that design enhancements have led to the introduction of a new product from the global leader in patient-friendly solutions for the gastrointestinal community - Given Imaging. Given's PillCam ESO, the swallowable diagnostic device which takes high-quality, high-speed photos as it passes through a patient's esophagus, has been granted FDA approval and will be making its way into use in medical centers immediately. Micron's new CMOS sensor, embedded in the PillCam, features a higher frame-rate than the original PillCam SB design. With one sensor at either end, and a frame rate 7-times that of the SB version, the new PillCam ESO (for ESophagus) transmits 14 pictures-per-second to a receiver worn by the patient. The added capabilities dramatically increase the system performance and will enable medical professionals to diagnose throat disease and related ailments in the esophageal passage.

Micron is the exclusive provider of the CMOS image sensors inside both of the PillCam designs. Working closely on performance specifications, Micron and Given engineers were able to increase the imager frame-rate, maintain low-power operations and develop a proprietary ALC (Automatic Lighting Control), thus enabling the new PillCam ESO.

Given's revolutionary PillCam SB (for small bowel), was first introduced in 2001 and was universally applauded as the first non-invasive method for direct visualization of the entire small intestine. Last month, that device was the recipient of the Wall Street Journal's Silver Award for Technology Innovation, and won First Place in the competition's Medical

Category.

Curtis Stith, Micron Imaging's Marketing Director for Emerging Markets, credits close collaboration with Given to enable these medical advancements. "This effort exemplifies Micron's commitment to innovation and technological improvement. It's a prime example of working closely with a customer to create advanced products that enable new applications. We're very excited that Given's PillCam products have received such prestigious recognition, and that they've received approvals for their next generation of product," he remarked.

Micron engineers and Given Imaging first started working together to develop the imaging technology inside Given's PillCam more than five years ago.

Citation: Enhanced Micron CMOS Image Sensor Enables Innovative New Medical Device (2005, January 17) retrieved 30 April 2024 from <https://phys.org/news/2005-01-micron-cmos-image-sensor-enables.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--