The Flexible Electronics and Display Center and PARC Produce World's Largest Flexible X-Ray Detector Manufactured With Thin Film Transistors

TEMPE, AZ and PALO ALTO, CA--(Marketwire - Mar 13, 2013) - The Flexible Electronics and Display Center (FEDC) at Arizona State University (formerly the Flexible Display Center) and PARC, a Xerox company, today announced that they successfully manufactured the world's largest flexible X-ray detector prototype using advanced thin film transistors (TFTs). Measuring 7.9 diagonal inches, the device was jointly developed at the FEDC and PARC in conjunction with the Army Research Lab (ARL) and the Defense Threat Reduction Agency (DTRA). This device will be used to advance the development of flexible X-ray detectors for use in thin, lightweight, conformable and highly rugged devices.

The TFT and PIN diode processing was done on the 470mm by 370 mm Gen II line at the FEDC. This device showcases the Center's successful scale up to GEN II, and the ability to produce sensors and displays using TFTs in standard process flows with the Center's proprietary bond/de-bond technology.

The system design and integration was done at PARC. The flexible x-ray sensor was coupled to a flexible electrophoretic display and electronics to provide a self-contained, direct-view unit (including battery, user-interface and software). This system shows PARC's capability to build user-defined prototype systems incorporating novel device physics, materials and technology. PARC has extensive experience in building large-area electronic systems, display and backplane prototypes, and organic and printed electronics.

About Flexible Electronics and Display Center at Arizona State University
Formerly known as The Flexible Display Center at Arizona State University, the FEDC is a government - industry - academia partnership that's advancing full-color flexible display technology and fostering development of a manufacturing environment to support the rapidly growing market for flexible electronic devices. FEDC partners include many of the world's leading...
providers of advanced display technology, materials and process equipment. The FEDC is unique among the U.S. Army's University centers, having been formed through a 10-year cooperative agreement with Arizona State University in 2004. This adaptable agreement has enabled the FEDC to create and implement a proven collaborative partnership model with over 20 active industry members, and to successfully deploy world class wafer-scale R&D and GEN-II display-scale pilot production lines for rapid flexible technology development and manufacturing supply chain commercialization. More information on the FEDC can be found at flexdisplay.asu.edu.

About PARC
PARC, a Xerox company, is in the Business of Breakthroughs®. Practicing open innovation, we provide custom R&D services, technology, expertise, best practices, and intellectual property to Fortune 500 and Global 1000 companies, startups, and government agencies and partners. We create new business options, accelerate time to market, augment internal capabilities, and reduce risk for our clients. Since its inception, PARC has pioneered many technology platforms -- from the Ethernet and laser printing to the GUI and ubiquitous computing -- and has enabled the creation of many industries. Incorporated as an independent, wholly owned subsidiary of Xerox in 2002, PARC today continues the research that enables breakthroughs for our clients' businesses.