

The Flexible Electronics and Display Center Produces Largest Flexible Color OLED Display Manufactured with Mixed Oxide Thin Film Transistors

Flexible Display Achieves Key U.S. Army Milestone; Delivers Vibrant Colors and High Switching Speeds for Video

TEMPE, Ariz. — July 2, 2013 — The Flexible Electronics and Display Center (FEDC) at Arizona State University today announced that it has successfully manufactured the world's largest flexible color organic light emitting display (OLED) prototype using advanced mixed oxide thin film transistors (TFTs). Measuring 14.7 diagonal inches, the device was developed at the FEDC in conjunction with Army Research Labs scientists.

"Mixed oxide TFTs offer a highly cost-effective approach for manufacturing displays that deliver high performance, including vibrant colors, high switching speeds for video and reduced power consumption – all features that will be required for the next generation of consumer electronics," said Nick Colaneri, Director of the FEDC. "Furthermore, mixed oxide TFTs can be manufactured on existing amorphous silicon production lines, eliminating the need for specialized equipment and processing, thereby reducing costs compared to competitive approaches."

The new device also meets a critical target set by the U.S. Department of Defense to advance the development of full-color, full-motion video flexible OLED displays for use in thin, lightweight, bendable and highly rugged devices. This latest version includes advancements in both the OLED materials to enhance performance as well as the encapsulation processes used to protect the display.

Flexible Electronics and Display Center at Arizona State University

The FEDC is a government – industry – academia partnership that's advancing full-color flexible electronics and display technology while fostering the development of a manufacturing ecosystem 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.

Media Contact:

Amy Smith
Impress Labs
Tel: +1 401-369-9266
amy@impresslabs.com

FDC Contact:

Nick Colaneri
Flexible Display Center
Tel: +1 480-727-8971
nicholas.colaneri@asu.edu