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THE WORLDWIDE PRINTED ELECTRONICS MARKET

2010 EDITION

**A Strategic Study on the Emerging
Worldwide Market for Printed Electronics**

Report Highlights

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- **Company Profiles**

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Synopsis

The market for printed electronics has become reality, albeit not at the rate that many have predicted. The barrier to exponential growth seems to be the inability of suppliers to lower costs so that mass-production manufacturing can be adopted. This is the classical economic dilemma with disruptive technologies when highly competitive and traditional alternatives exist that continue to innovate at similar or at least equitable rates. As with the semiconductor market that preceded it, specific applications are legitimizing the acceptance of printed electronics, yet to date they are only niche applications. Some appear to be very promising, yet for all the innovation that has occurred since our last report, released in 2007, printed electronics has had little impact in replacing existing applications and has made only incremental progress in creating new ones. This is not to understate the spectacular new technologies coming out of R&D, but no "killer app" has yet emerged to truly disrupt the traditional markets.

Printed materials and conductive inks have begun to penetrate many established products and extend them in new ways. The most immediate applications concern RFID and OLED displays, which are manufactured using OTFT technology. These technologies are penetrating a wide number of customer applications, and as costs decline and performance improves, will justify customers switching to and, in many cases, implementing entirely new design solutions. Others applications, such as packaging, and photovoltaic and battery storage technology, are emerging slowly but represent great potential.

As a result, it can be safely said that printed electronics is a disruptive technology. However, as with any exciting topic, there is a lot of speculation and exaggerated estimates about the impact of printed electronics over time. To assist your evaluation of the future direction of printed electronics, *New Venture Research* is pleased to present *The Worldwide Printed Electronics Market, 2010 Edition*, a comprehensive worldwide market study on the trends, issues, and leading companies in printed electronics.

The objective of this report is to provide a macroeconomic understanding of the worldwide printed electronics market. The report's analysis starts with 2009 and looks forward for the next ten years.

This report is organized into six chapters. **Chapter 1, Introduction**, outlines the scope, organization, and methodology for the report. **Chapter 2, Executive Summary**, presents top-level data from throughout the report.

Chapter 3, Printed Electronics Technology, examines the basis for printed electronics and considers the fundamental materials science behind organic and inorganic conductors and polymers and how they might be printable. The strengths and weaknesses of various printing technologies, as they pertain to this industry, are also examined. The chapter closes by looking at the latest developments in conductive inks and the variety of substrate surfaces for printable electronics, and provides examples of some of the most promising conductive inks.

Chapter 4, Printed Electronics Markets, 2009, examines the leading industry segments and applications for printed electronics, such as RFID, OLED OTFT for logic, memory and sensors, smart labels and intelligent packaging, and PV. The chapter also quantifies the current market in terms of units, ASP, and sales revenue.

Chapter 5, Printed Electronics Market Forecasts, examines how the market for printed electronics is expected to grow by leading application area. These markets are also quantified in terms of unit shipments, ASP, and sales revenue.

Chapter 6, Company Profiles, covers the leading industry participants, including materials suppliers (films, nanoengineered substances and electronic ink suppliers), manufacturers (IC companies, vertical OEMs, and large conglomerates), component suppliers, and integrators. These profiles summarize the market focus of each company.

As the future of printed electronics is critical to your business, please review the report's outline on the following pages. *The Worldwide Printed Electronics Market, 2010 Edition* will provide you with the critical information you need to assess this emerging and dynamic market.

This report is available in electronic format only and is delivered by email as a single-user PDF file (extra licenses are \$250). Contact us directly about corporate licensing.

About the Author

Randall Sherman is president of New Venture Research Corp., a market research publishing and business consulting firm focused on the electronics manufacturing industries, and serves as principal analyst for this report. Mr. Sherman has more than 25 years' experience in technology, product, and business research. He began his career as a telecom network design engineer. He has held senior analyst and management positions at various market research firms, including Creative Strategies International and Frost and Sullivan. Mr. Sherman holds a BS in Astrophysics, a MSEE from the University of Colorado, and an MBA from the Edinburg School of Business.

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Published March 2010 – 249 Pages

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