Printed and Flexible Electronics in Automotive Applications 2016-2026

Description:

This report focuses on technologies and components in automotive applications that benefit from the advent of printed/flexible electronics and already represent a market of a few hundred million dollars in 2016.

Some of the technologies described within the report are mature markets and are not expected to dramatically increase their market share or revenues (e.g. windscreen de-foggers) whereas others, such as structural or in mold electronics, are expected to grow significantly in the next decade.

Finally, other technologies such as e-textiles for example, are expected to take a few more years of development before we see them rolled out into automotive applications.

Overall, the market is expected to grow to over $5.5 billion dollars in the next decade, spearheaded by the growth of in mold electronics and OLED technologies.

The specific technologies discussed are listed below:

- Conductive Inks - a significant market in its own right, the market for conductive inks has seen application in vehicles in components such as window de-foggers and car-seat heaters.
- In Mold Electronics - also known as structural electronics, they are set to revolutionize the interiors of vehicles with increased design freedom and performance while reducing complexity.
- Haptics - a toolkit of technologies that will make touch-enabled technologies in cars "come alive".
- Force Sensing Resistors and other sensor technologies: Sensors are offering consumers improved comfort and awareness of their surroundings while enabling and fast tracking overarching concepts such as that of "the connected car".
- OLED Displays & OLED Lighting - flexible light weight displays and lighting enabling applications ranging from exterior and interior lighting and design, all the way augmented reality(AR) integration in vehicles.
- Thermal Interface Materials - A range of materials enabling the dissipation of heat generated by different components in order to maintain junction temperatures.
- Photovoltaics - improving fuel consumption and overall vehicle efficiency while maintaining green credentials and reducing emissions in accordance with tightening regulations globally.

The report includes descriptions of current and upcoming use cases of these technologies by existing and potential adopters and a detailed listing of the most significant players in each segment; it also includes relevant, interview-based company profiles, compiled using primary research by experienced market analysts, identifying and comparing activities of each of the major players in the key market sectors addressed.

Finally, distilling over 15 years of experience in the space for printed/flexible electronics along with primary and secondary research on the technologies described in the report, 10 year forecasts for the growth of the market are given, alongside with potential future directions and markets that show promise in the long term.

Contents:

1. Executive Summary And Conclusions
2. Conductive Inks In Automotive Applications
   2.1. Where are conductive inks/pastes used in cars?
   2.2. Printed rear window de-foggers
   2.3. Printing on polycarbonate car windows?
   2.4. Key suppliers into this market
   2.5. Market forecast for conductive paste in window de-foggers
   2.6. Printed car seat heaters
   2.7. Car seat heaters
   2.8. Graphene inks are a potential substitute?
   2.9. Key suppliers
2.10. Market forecast for printed car seat heaters

3. Structural Or In-Mould Electronics
3.1. Structural or in-mould electronics
3.2. In-moulded parts for cars
3.3. Printed and thermoformed overhead console
3.4. Thermoformable CNT-based transparent conductive films
3.5. CNT-based thermoformed 3D touch surfaces
3.6. PEDOT as a thermoformable 3D touch surface
3.7. Thermoformable conductive inks
3.8. TactoTek
3.9. Plastic Electronic
3.10. Recovering from the T-Ink - Ford false start
3.11. Key suppliers into this market
3.12. Market forecast for car parts made using in-mould electronics

4. Haptics
4.1. Types of Haptics Technologies
4.2. Many alternate options to the ERM motor
4.3. ERM motors remain dominant in the marketplace
4.4. Automotive interest in haptics is peaking

5. Force Sensing Resistors (FSR)
5.1. What are force sensing resistors (FSR)?
5.2. Force vs. Resistance characteristic curve
5.3. Where are FSRs used in the automotive sector
5.4. Key suppliers
5.5. Market forecast for FSRs in cars

6. OLED Displays
6.1. Progress with OLED Displays
6.2. OLED Display Market ($ million)
6.3. Where are OLED displays used in automotive applications?
6.4. PMOLED
6.5. AMOLED
6.6. Transparent OLED
6.7. Key suppliers
6.8. Market forecast for OLED displays in cars - units

7. OLED Lighting
7.1. Where is OLED lighting used in automotive applications?
7.2. OLED lighting - Examples
7.3. Key suppliers
7.4. LED vs. OLED lighting: a strong incumbent
7.5. Market forecast for OLED lighting in cars

8. Thermal Interface Materials
8.1. Introduction
8.2. Where are TIMs used in the automotive industry?
8.3. LEDs in automotive
8.4. Thermal Greases are still the norm
8.5. Electronic Control Units
8.6. Under-the-hood is a harsh environment
8.7. Alternatives: Phase Change Materials
8.8. Alternatives: Carbon Nanotubes
8.9. Carbon nanotubes - Stanford University
8.10. Key suppliers
8.11. Markets
8.12. Market forecast for printed TIMs in automotive applications
8.13. Thermoelectric Coolers and Generators

9. Printed/Flexible Photovoltaics
9.1. Where are printed/flexible photovoltaics envisaged in cars?
9.2. Webasto: Semi-transparent solar PV roof
9.3. Challenges in the adoption of PV in automotive applications

10. Discussion- Conclusions - Future Directions
10.1. Discussion - conclusions
10.2. Market forecast for printed/flexible electronics in automotive applications
10.3. E-textiles in vehicle interiors
10.4. Thermoelectric Coolers and Generators
10.5. Sensors in the connected car

11. Company Profiles
11.1. Agfa
11.2. AOS
11.3. Canatu
11.4. DuPont
11.5. Henkel
11.6. Interlink Electronics
11.7. LG Display
11.8. Merck
11.9. Nagase America Corporation
11.10. Philips
11.11. Plastic electronic
11.12. PolyIC
11.13. Samsung
11.14. Sensitronics
11.15. TactoTek
11.16. Tangio Printed Electronics
11.17. T-Ink

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