

Objective ICT-2007.3.2

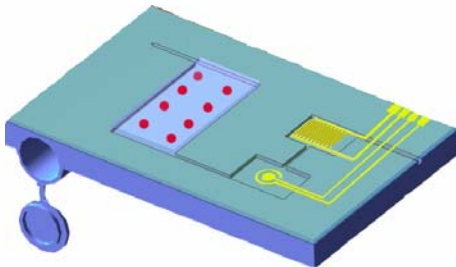
Organic and large-area electronics, visualisation and display systems

ICT Proposers' Day
Köln, 1 February 2007

Presentation outline

- Objective 2007.3.2
 - a) Organic & large-area electronics

Lab on foil system



Courtesy of Fraunhofer IZM

RF-ID tag



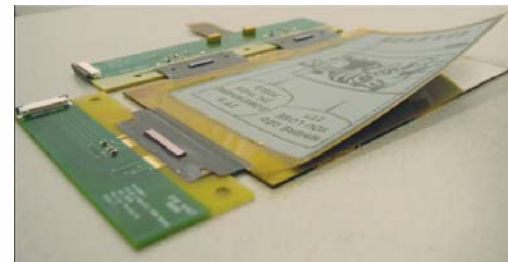
Courtesy of Philips

Large area processing



Courtesy of Fraunhofer IZM

- b) Visualisation & display systems



Objective IST 2007.3.2 (a) & (b)

Call 1

- Closing 8 May 2007

Funding schemes

Total Budget (a)+(b): 63 M€ *

- Collaborative projects: IPs, STREPS: 57 M€*
- Networks of Excellence: 3 M€*
- Coordination and Support Actions: 3 M€*



* Amount is to be confirmed after the Commission decision on 2008 budget

Objective IST 2007.3.2 (a)

Organic and Large Area Electronics

Expected Outcome

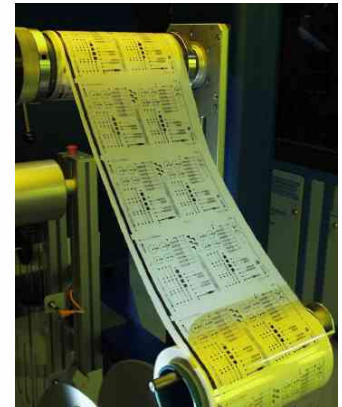
Large area technologies for new manufacturing paradigms enabling system in foil integration and low costs applications

Technology areas

- Additive / printable processes & corresponding equipment & materials
- Flexible interconnects and device encapsulation
- device architecture and characterisation
- Device modelling and circuit design

Enabling Functionalities

- logic, memory, RF
- Sensing, Photovoltaic
- Organic Light Emitting Diodes
- energy scavenging/storage & power management

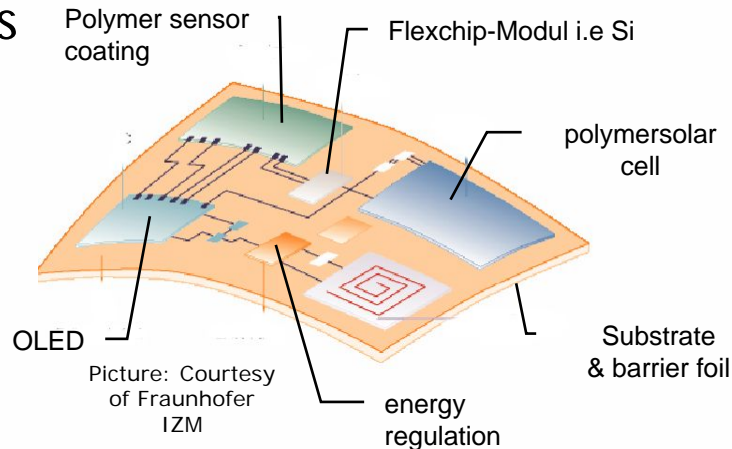


Objective IST 2007.3.2 (a)

Organic and Large Area Electronics

Expected applications

- e-paper, flexible displays
- smart tags, RFIDs
- Intelligent lighting
- Bio-sensors, lab on chip
- System in foil
- Sheet PVs & batteries



Picture: Courtesy of Plastic Logic Ltd

Support measures

- Access to competence & infrastructures
- Training & education
- Joint users assessment of prototype equipment
- Develop synergies between the electronic, equipment, material & printing industries

Objective IST 2007.3.2 (b)

Visualisation & display Systems

Expected Outcome

- 3-D: Unrestricted visualisation, natural scene acquisition & representation
- User interaction
- Extended performance, novel technologies
- display systems for next generation portable applications



Areas of activity

- Multi-viewer, pseudo-holographic 3D displays, 3D signal acquisition and processing
- Extended colour & brightness space
- Zero-power, foldable/transparent, virtual displays, μ -projectors



Objective IST 2007.3.2 (a) & (b)

Expected IMPACT

Organic and large area electronics

- Reinforce Europe's leading role
- New markets and new generation of electronic devices
- New manufacturing paradigms

Visualisation and displays:

- Wider use of third dimension
- Strengthening of Europe's scientific and business position in key application areas like mobile, medical, professional, new media

Objective IST 2007.3.2 (a) & (b)

Contribution to Challenge 3 objectives

by complementing objectives 2007.3.1, 3.5 & 3.6
to provide key IT subsystems to support the
competitiveness of EU industry in all application
sectors

Further Information & Contact

- **European research on the web:**
 - <http://cordis.europa.eu>
 - <http://cordis.europa.eu/fp7>
 - <http://ec.europa.eu/comm/research/future/>
- **Information Society and Media:**
 - http://ec.europa.eu/information_society/
 - <http://cordis.europa.eu/ist>
- **Unit web-site:**
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