

D3.2: Flexible control circuitry coupled with smart fabric early prototypes with documentation (design and operation)

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Project acronym: CREATIF

Project full title: Digital creative tools for digital printing of smart fabrics

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SEVENTH FRAMEWORK PROGRAMME

FP7-ICT-2013-10: Objective ICT-2013.8.1 Technologies and scientific foundations in the field of creativity

Publishable short non-confidential summary

The design of the electronic control circuitry is outlined. This circuitry will be supplied with the printed smart fabrics. It activates the various smart functions integrated within the smart fabric. Items which can be controlled are the proximity sensor, the sound emission, the light emission and the colour change. The incorporated software allows a number of parameters such as the lamp blink rate to be set by the smart fabric designer.

The deliverable also discusses methods of interconnection between the smart fabric and the electronic circuit and the feasibility of solar powering the entire smart fabric system including the electronics. The preferred type of power supply for the electronic circuit is also discussed. The circuit has been realised and tested demonstrating the operation of smart fabric functions.

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Project partners:

UoS – University of Southampton (ECS) – <http://www.ecs.soton.ac.uk/> - UK

ITA - RHEINISCH-WESTFAELISCHE TECHNISCHE HOCHSCHULE AACHEN -
<http://www.ita.rwth-aachen.de/> - Germany

GSoft - Grafisoft - <http://www.grafisoft.com/> - Bulgaria

Diffus – Diffus Design - <http://www.diffus.dk/> - Denmark

Base – Base Structures Ltd - <http://www.basestructures.com/> - UK

Zaha – Zaha Hadid Architects - <http://www.zaha-hadid.com/> - UK

Ardeje – Ardeje - <http://www.ardeje.com/> - France