

# TECHBRIEF

## **BADGE**

### **BitSim Accelerated Display Graphics Engine**

#### **A display controller with acceleration for embedded systems**



BADGE works as a graphics engine in embedded systems, but doesn't suffer from the short life cycles affecting the usual graphics controllers. It is very flexible. Can interface to numerous types of processors, memories and displays.

BADGE provides 2D graphics acceleration with single or multiple video streams (including text and graphics overlay) and is an Intellectual Property (IP) core which can be used in both FPGAs and ASICs.

The modular design of BADGE allows it to be customized for your specific needs, optimizing for cost focused applications or for high performance requirements, but also makes it possible to add new functionality through your products life-cycle.

BADGE is easy to use and includes an API, drivers for both Windows and Linux and a backend to Qtopia.

The BADGER Reference design is available for BADGE. It is easy to evaluate and demonstrate intended usage.

SW Utilities translates Fonts and Pictures from the regular desktop environment to the format used by BADGE in the target system, or the BADGE reference design

VER1\_10

BitSim AB

[www.bitsim.com](http://www.bitsim.com)

BitSim

## Benefits / Performance

- High resolution – 4096 x 4096 pixels
- High color depth – 24-bit color, plus alpha
- Quality graphics acceleration with subpixel rendering



## Flexibility

- Any display format, memory type and processor interface
- Scaleable for performance or cost
- Scaleable for small or large displays
- Any FPGA family and vendor
- Easy to adapt and modify

## Future proof

- Wide selection of available components and vendors, a multitude of FPGAs, packages and temperature ranges
- Surf the FPGA technology. Dramatic development of performance and price
- Product life cycle ownership
- Migrate when you choose
- Avoid EOL disasters: