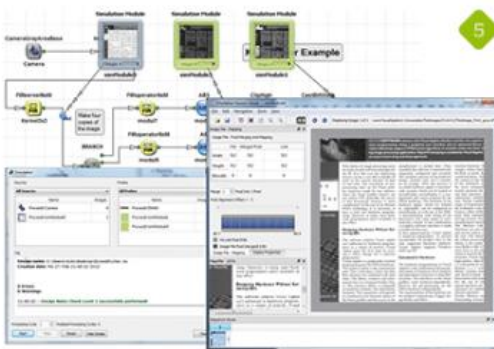


VisualApplets

Realizing Real-time Vision Individually

VisualApplets is the integrated development environment for real-time applications on FPGA-processors in image processing. This solution is used in numerous industrial applications and in a variety of industries. VisualApplets opens up access to FPGA processors in image processing hardware—such as frame grabbers, industrial cameras, and image processing devices—to realize individual image processing applications.



High level simulation and preview of visual result

The approach of representing FPGA programming by data flow models on a graphical user interface makes it easy for hardware and software developers and application engineers to create applet designs for complex image processing tasks intuitively and in a short period of time – even with no hardware programming experience. All programmed applications are carried out on the FPGA hardware in real-time.

Designs arise from a combination of operators, filter functions, and transport links

In the year of its initial release, VisualApplets was honored with the International Vision Award for 2006 and has enjoyed success ever since.

Silicon Software's programmable V-Series frame grabbers are pre-licensed for use with VisualApplets. They can be equipped with image processing applications that are executed directly on the frame grabber with high parallelism and minimal latency. Third-party manufacturer Baumer has already made the LX VisualApplets camera series fully compatible with VisualApplets 3.

Graphical FPGA Programming for Real-Time Applications - Your Benefits

- + Graphical User Interface
- + Operator Libraries
- + Configurable Libraries
- + Easy Porting
- + Design Rules Check
- + Inheritance of Parameters
- + Display of the Available FPGA Logic
- + Display of Transport Links' Bandwidth
- + High-level Simulation
- + Programming of the Signal Control
- + SDK Output
- + Hardware Independence

Every VisualApplets delivery includes arithmetic and morphological operators for pixel manipulation, logical operators for classification tasks, complex modules for color processing, operators for statistical image analysis, and processing of image sequences, among others. Additional operators are responsible for format conversion, compression or conversion to pixel lists. Special features include control signal programming to individualize trigger functionality as well as segmentation and classification functions in the blob analysis operator.

Read more about the VisualApplets libraries and operators (User Documentation)

Users receive a fast and effective introduction to hardware programming using an expanded offering of sample applications. In Silicon Software's workshops (and in Stemmer Imaging workshops as well), all essential technical and application-related questions are answered.

Many of our partners and distributors have been certified for VisualApplets. Certification as a VisualApplets Design Center (VADC) enables them to advise customers, provide support, and create applet designs.

For Developers

How you can accelerate your project

- + Reducing CPU Load
- + FPGA Programming for Everyone
- + Graphical Application Development
- + Team Functionality
- + Operators and Libraries
- + Design Rules Check and Visual Debugging
- + FPGA Resource Estimation
- + Bandwidth Analysis
- + Simulation
- + Event Control
- + Parameterization at Run Time
- + Build Process
- + Implementation Using microDisplay
- + SDK Code Generator
- + 3rd-Party Libraries

For Decision Makers

How you can make your project a success

- + Accelerated Time to Market
- + No Staff Shortages
- + Rapid Return on Investment
- + Protection of Intellectual Property