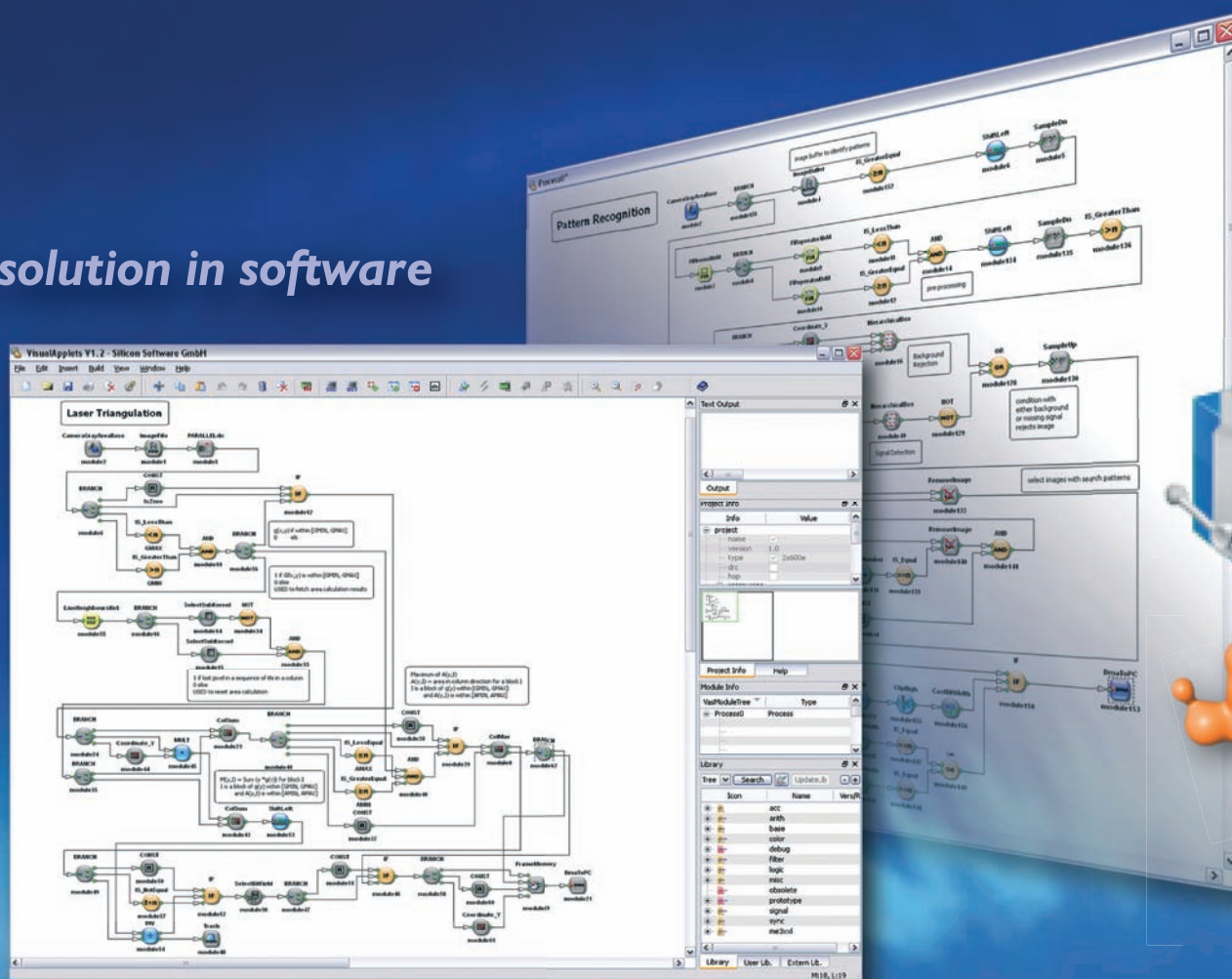


a hardware solution in software



New library available:
JPEG Compression

New library available:
BLOB ID and 2D

VISUALAPPLETS
the graphical FPGA programming tool

VISUALAPPLETS Operator Overview

Preview Ver. 1.3 | November 2008

ACCUMULATION LIBRARY

	Column Maximum
	Column Minimum
	Column Sum
	Count
	Frame Maximum
	Frame Memory
	Frame Minimum
	Frame Sum
	Histogram
	Line Memory
	Register
	Row Maximum
	Row Minimum
	Row Sum

ARITHMETIC LIBRARY

	Absolute
	Addition
	Arc Cosine
	Arc Cotangens
	Arc Sine
	Arc Tangens
	Clipping High
	Clipping Low
	Cosine
	Cotangens

	Division
	Multiplication
	Random
	Scaling
	Shift Left
	Shift Right
	Sine
	Square Root
	Substraction
	Tangens

BASIC LIBRARY

	Branch
	Cast Bit Width
	Cast Color Space
	Cast Parallel
	Cast Type
	Constant
	Convert Pixel Format
	Coordinate X
	Coordinate Y
	Dynamic ROI
	Edif Input Box*
	Hierarchical Box
	Image Number
	Merge Components
	Merge Kernel

	Merge Pixel
	No Operation
	Parallelism down
	Parallelism up
	Sample Down
	Sample Up
	Select Bit Field
	Select Component
	Select From Parallel
	Select ROI
	Select SubKernel
	Set Dimension
	Split Components
	Trash

BLOB LIBRARY (*)

	BLOB 1D
	BLOB 2D

COLOR LIBRARY

	Bayer 3x3 Linear
	Bayer 5x5 Linear
	Color Transform
	HSI to RGB
	RGB to HSI
	RGB to XYZ
	RGB to YUV
	White Balance

	White Balance Bayer
	XYZ to RGB

COMPRESSION LIBRARY (*)

	JPEG Buffer Color
	JPEG Buffer Grey
	JPEG Encoder Color
	JPEG Encoder Grey

FILTER LIBRARY

	Dilate
	Erode
	FIR Kernel NxM
	FIR Kernel NxM ID
	FIR Operator NxM
	Hit Or Miss
	Line Neighbours Nx1
	Maximum
	Median
	Minimum
	Numbers Of Hits
	Pixel Neighbours 1xM
	Sort

LOGIC LIBRARY

	AND
	Case
	Compare A ge B
	Compare A gt B

	Compare A le B
	Compare A lt B
	Compare Equal
	Compare Not Equal
	IF
	Is Equal
	Is Greater Equal
	Is Greater Than
	Is In Range
	Is Less Equal
	Is Less Than
	Is Not Equal
	Logical AND
	Logical NOT
	Logical OR
	NOT
	OR
	XNOR
	XOR

MISCELLANEOUS LIBRARY

	Knee Look-Up Table
	Look-Up Table
	ROM

SIGNAL LIBRARY

	Delay To Signal
	Downscale

	Event To Signal
	Frame End To Signal
	Frame Start To Signal
	Generate
	Get Signal Status
	Get Status
	Ground
	Limit Signal Width
	Line End To Signal
	Line Start To Signal
	Period To Signal
	Polarity
	RS FlipFlop
	Select
	Set Signal Status
	Shaft Encoder
	Shaft Enc Compensate
	Signal Debounce
	Signal Delay
	Signal Edge
	Signal Gate
	Signal To Delay
	Signal To Period
	Signal To Width
	Signal Width
	Synchronize Signal

	VCC
	Width To Signal

SYNCHRONIZE LIBRARY

	Append Image
	Append Line
	Expand Line
	Expand Pixel
	Insert Image
	Insert Line
	Insert Pixel
	Remove Image
	Remove Line
	Remove Pixel
	ReSync To Line
	Split Image
	Split Line
	Synchronize

HARDWARE RES. LIBRARY

	BASE Gray Area
	MEDIUM Gray Area
	FULL Gray Area
	BASE Gray Line
	MEDIUM Gray Line
	FULL Gray Line
	BASE RGB Area
	MEDIUM RGB Area

	BASE RGB Line
	MEDIUM RGB Line
	CameraControl
	Coefficient Buffer
	Digital IO Port
	DMA From PC
	DMA To PC MultiChannel
	DMA To PC
	GPI
	GPO
	Image Buffer
	Image Buffer MultiROI
	ImageBufferMultiROIDyn
	Image Buffer SC
	Image Buffer Spatial
	Image FIFO
	Image Sequence
	Native Trigger Port In
	Native Trigger Port In Ext
	Native Trigger Port Out
	Rx Link
	Trigger In
	Trigger Out
	Trigger Port Area
	Trigger Port Line
	Tx Link