Open eVision 1.2 is a rich suite of reliable, powerful and flexible software tools dedicated to image processing and analysis. Open eVision contains a set of 64-bit and 32-bit libraries designed to be integrated into your C++, .NET or ActiveX application. The general purpose libraries, EasyImage, EasyColor, EasyObject, EasyMatch, EasyFind and EasyGauge cover applications such as image filtering and enhancement, blob analysis, pattern matching, alignment and metrology. The mark inspection libraries, EasyOCV, EasyOCR, EasyBarcode and EasyMatrixCode, include functions for optical character recognition, character printing inspection and 1D / 2D barcode reading.

EasyImage™
Image Processing Library
Convolution and morphology I Geometric transformations I Image statistics I 16-bit accuracy processing I Flexible masks I Interest point detectors

EasyColor™
Color Image Analysis Library
Fast conversion to 11 color spaces I Color segmentation I Color verification

EasyObject™
Image Processing Library
Image segmentation I Object labeling I Geometric feature extraction I High performance, especially for large images and images with numerous objects I Flexible masks

EasyMatch™
Pattern Matching Library
Normalized correlation method I Sub-pixel accuracy I Rotation and scaling support I Multiple pattern occurrences I Gray-level and color images support I Non-square pixels management I Don't care areas

EasyFind™
Geometric Pattern Matching Library
Feature point technology I Fully automatic, fast and robust I Rotation and scaling invariant I High tolerance to pattern degradation I Don't care areas I User-defined pivot point I Fast processing and improved robustness

EasyGauge™
Sub-pixel Measurement and Dimension Control Library
Sub-pixel point location and edge fitting I Highly accurate and robust I Position, orientation, size, curvature, distances I Advanced and automatic calibration I Multiple gauge models I Gauge Grouping I Graphical model edition
REGIONS OF INTEREST AND FLEXIBLE MASKS
The processing speed of an image can be accelerated by focusing on a specific region of the image (Region of Interest) avoiding interferences from the remainder of the image. The number of pixels to consider is then reduced. The processing of all Open eVision functions can be restricted to a Region of Interest (ROI). Open eVision supports nested rectangular ROIs, which are organized in a hierarchical way in each image. To add flexibility to the shape of the ROI, Open eVision supports Flexible Masks for selected functions of the EasyObject and Easymage libraries. A mask represents a two-class segmentation of pixels which separates the associated image in do-care areas (that must be considered) and don’t-care areas (that should not be considered). Flexible masks support complex and disconnected shapes.

COMPATIBLE WITH
- Windows® x86 processor architecture
- A wide variety of programming languages and development environments
- eVision 6.7.1 and open eVision 1.0 C++ and ActiveX APIs

OPEN TO ALL IMAGE SOURCES
The Open eVision libraries do not rely on any proprietary hardware device to run. They are able to process images available in the host memory, whatever their origin. The images to be processed may come from a frame grabber, a scanner file, or IEEE1394 (Firewire), GigE Vision or USB cameras. Color and monochrome images are supported.

ORDERING INFORMATION
An Open eVision customer is free to choose among a large choice of products the most suitable and attractive offer for his application. Libraries can be purchased individually, in a bundle or in a SDK. No development license are required!
- Open eVision Inspection bundle: EasyImage, EasyColor, EasyObject, EasyMatch and EasyGauge
- Open eVision Mark Inspection bundle: EasyOCR, EasyOVC, EasyBarCode and EasyMatrixCode

Learn more about the licensing and ordering information on Euresys web site.