



Visual Object Detection

Accelerator type: Accelerator building block

A key task in image analytics is identifying regions of interest (ROIs). ROIs are areas in an image that are likely to contain objects of importance to the particular application. Once identified, ROIs can subsequently be analyzed to detect the presence of these objects of importance. By focusing object recognition only on ROIs, high system throughput can be maintained without loss of overall scene understanding functionality.

Accelerator detail: This accelerator solution provides real-time ROI detection capabilities for machine vision and video analytics applications. It would typically be the first stage of a visual object detection and classification system, and is delivered as a hardware library and software API.

Competitive advantage

The Visual Object Detection accelerator is capable of identifying regions of interest for HD imagery (1920x1080) at 45 frames/second. By comparison, a pure software implementation can achieve only two frames/second, on average. This solution provides the throughput necessary to process live imagery or prerecorded video for security and surveillance applications.



For more information, contact

kevin.irick@siliconscapes.net